RCMA NEWSLETTER

NOVEMBER 1987

Photo by Hugh Stegman (CA-LA-472)

FIRST NATIONAL AND INTERNATIONAL ORGANIZATION OF MONITOR RADIO LISTENERS

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RCMA NEWSLETTER

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Silverado, CA 92676

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961 Azalea Street
Boca Raton, FL 33432

ASSISTANT EDITOR

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P.O. Box 1198
Manhattan Beach, CA 90266-8198

FOR YOUR INFORMATION:

1. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropiate, send input to RCMA, P.O. Box 1198, Manhattan Beach, CA 90266-8198

2. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA General Manager, P.O. Box 542, Silverado, CA 92676.

3. PLEASE INCLUDE YOUR RCMA MEMBERSHIP NUMBER WITH ALL CORRESPONDENCE to newsletter editors or club headquarters.

4. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

5. Please write on only one side of the paper.

6. Please don't combine in one letter several items that should go to different addresses.

7. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

8. Your RCMA membership number and expiration date appear on your newsletter mailing label.

9. You may join or renew your membership for ONLY one year at a time.

10. RCMA accepts paid advertising. For information on advertising rates and mechanical requirements, contact Carol Ruth, RCMA Advertising Manager, P.O. Box 542, Silverado, CA 92676.

RCMA Newsletter

Issue 141 November 1987

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CONTACTING RCMA?

For membership applications or renewals, address changes, inquiries about delivery or renewal problems, write to:

RCMA General Manager
P.O. Box 542
Silverado, CA 92676

Have a comment about RCMA club policy or newsletter content? Write to:

William Mauldin, RCMA General Editor
961 Azalea Street
Boca Raton, FL 33486

Want a letter published in *Your Thoughts* column? Write to:

Kurt Swaney, RCMA Assistant Editor
P.O. Box 1198
Manhattan Beach, CA 90266-8198

Correspondence sent to RCMA's Anaheim P.O. Box will still be answered, but there will be a 4-6 week delay.

Cover Photo: This MDT (Mobile Data Terminal) was photographed at an LAPD Demonstration. The "old" VHF radio system is used.

Photo by Hugh Stegman (CA-LA-472)

The RCMA Newsletter is published by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, Inc., P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $16.50 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$18.50; Europe—$20; South Pacific and Asia—$21.50. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. RCMA, Inc. does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted©. Reproduction of any material in this newsletter is prohibited without prior written consent.

CALENDAR

Send notices of upcoming events for the Calendar section to:
John R. Clark, 2701 Fairview Road, Costa Mesa, CA 92626

Deadline: 1st of the month two months prior to cover date.

NEW GROUP FORMED BY LES MATTSON NJ 187 COMPLETE WITH A NEWSLETTER

"The Northeast Scanning News" is being published by Les Mattson, 212 West Broad Street, Paulsboro, NJ 08066. More information about this group will be in the next issue.

R.C.M.A. Greater Los Angeles Area Chapter

We are still in the process or a reorganization. Check this column next month. Late minute information may appear on 446.375 MHz. Remember the TRW Swap Meet "walk about" is the last Saturday of each month. Most of the old members are there.

R.C.M.A. West Los Angeles Area Chapter

Contact : Rick DiFiore (CA-LA-544) (213) 397-6581 or
Hugh Stegman (CA-LA-472) (213) 398-5353
Talk in: 146.925 MHz {-600 PL-2A} Tues 1930 hrs net.

Meetings on the second Wednesday of each month at 7:30 PM. The location is Shakey's Pizza Parlor, 12924 Washington Blvd, Culver City. Take the 405 Freeway to Washington, and go west to the Shakey's at the corner of Beethoven St. Use frequency 146.925 for talkin.

Austin Area Radio Listeners Meeting

Contact David Litsinger TX-032 441-0650
P.O. Box 17142, Austin, TX 78760

Meetings 3rd Thursday 7:00 PM NOTE NEW TIME, DATE AND LOCATION
South Austin Multi-Purpose Center
2508 Durwood (off 500 Blk W. Olterf)
Lots of easy parking here

R.C.M.A. Chicago Chapter

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Saturday November 7 1987 1:00 PM

Tour of the Woodridge Il Police Deparment 800 MHz radio system. This tour will include the dispactch center, training room with vidio, equipment room, and rotorcade to a repeater site.

Saturday November 14 1987 1:00 PM

Final meeting of the year will be held at The Renaisance Resturant, 2310 S. Elmhurst/York Road, corner of Elmhurst/ York Road, Devon Ave. and Runway 14R Elk Grove Village (312) 766-2040.

Visitors are welcome but please confirm the date in advance.

The Chicago Chapter requests members send a years supply of 9 SASE's plus $2.00 to the "contact person" listed above. The funds will cover the printing of a newsletter that will be sent of all chapter members just before each meeting.

R.C.M.A. for D.C., MD, VA & DE

Contact: Capitol Hill Monitors % Alan Henney (MD 069)
6912 Prince Georges Ave, Takoma Park, MD 20912

Local chapter newsletter is supplementary to the RCMA newsletter. Because members are so far apart, no meetings are presently scheduled. However, anyone interested in corresponding or meeting local area members may send their name, address, phone (optional) & monitoring interests to above address. A list of these names and interests will be compiled and sent to individuals on the list. Visitor, traveler, frequency & newsletter requests are also welcome.

R.C.M.A. Minneapolis - St. Paul Area Chapter

Contact: Chuck Steier MN-008 (612) 927-9253
4820 Hwy 7, Minneapolis, MN 55416

A SASE on file assures notification of chapter activities (tours, gatherings, etc). Non members are welcome to attend.

All Ohio Scanner Club

Contact David B. Marshall OH-146, Managing Editor
50 Villa Road, Springfield, OH 45503-1036

The All Ohio Scanner Club covers all of Ohio, plus Inidana, Kentucky, Michican, Pennsylvania, West Virginia, and Ontario, Canada, plus other areas as well. Members from these and other areas are welcome. The AOSC newsletter also features execellent fedteral goverment and below 30 MHz utilities columns.

Sample Newsletter $2.00. Membership information for a SASE

R.C.M.A. Wisconsin Chapter

Contact Scott W. Miller WI-039
122 Greenbriar Drive, Sun Prairie, WI 53590

NEED RCMA BACK ISSUES?

1985, 1986 and 1987 issues to date are available until Dec. 31 of this year, at which time 1985 issues will no longer be stored. The following postage rates apply to all orders, and are in addition to the cost of the newsletters.

THE COST OF EACH ISSUE IS $1.00
When ordering, calculate $1 per issue. Then refer to the chart below to the correct amount of postage. (Rates based on lst class USPS)

# OF ISSUES	AMOUNT OF POSTAGE
1	$ .73
2	$ 1.41
3	$ 2.09
4 thru 8	$ 2.40
9 thru 12*	add $ .48 for each issue

*Orders shipped at maximum of one year (12 issues) per package.

NO COLUMN THIS MONTH. . .

Listener Profile
Editor: Joe Lewis, 750 Scotland St, Dunedin, FL 34698

Marketplace
Editor: Gary Darcy, P.O. Box 1329, Palmdale, CA 93550

New Product Review
Editor: James Abdu, 340 McGill Pl, Atlanta, GA 30312

Special Events
Editor: Nathaniel Lewis, P.O. Box 6952, Philadelphia, PA 19138

VHF Marine
Editor: Emmett Baxter, Jr., 4122 Granby St, Norfolk, VA 23504

ASSOCIATION OF NORTH AMERICAN RADIO CLUBS NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well-established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below.

Write to: ANARC Newsletter, P.O. Box 462, Northfield, MN 55057 for the following:

- **Copy of ANARC Club listing—send 25 cents and a business size SASE**
- **Sample copy of ANARC Newsletter—send 60 cents and a business size SASE**
- **Annual subscription to ANARC Newsletter—$7.50 for residents of the U.S., Canada, and Mexico; $10 Overseas (Airmail)**

OCTOBER 17 - SOUTHERN CALIFORNIA AREA DXERS (SCADS) Saturday, 10AM-3PM. Lutheran Church of the Holy Trinity, 1900 East Carson St., Long Beach,CA All DXers are welcom. For program details, Send a SASE to S.C.A.D.S., % Don R. Schmidt, Director, 3809 Rose Ave, Long Beach, CA 90807-4335

ED NOTE : We are short this month, something happened to the input Looks like the USPS needs another increase in postage.

your thoughts

Kurt Swaney, RCMA Assistant Editor
P.O. Box 1198, Manhattan Beach, CA 90266-8198

Your Thoughts is the RCMA members' forum on current topics of interest to the scanner hobbyist. If you have an opinion you would like to express, RCMA encourages you to send it in.

Your letter must include your name, address, and RCMA membership number. Due to space limitations, RCMA reserves the right to condense submitted material.

Dear Your Thoughts: 8 Aug 87

Ronald Steiner (NY-365) raises some valid issues in his letter of May, 1987.

There may be other members who wonder why a monitoring club would cover HF radio. However, the key word for me is just that -- monitoring.

While it is true that at least eight, and probably more like 100, other clubs cover HF, only three or so share the RCMA emphasis on content, rather than the DX'ing goal of collecting countries or prefixes like rare butterflies. Even in this small group, RCMA is already doing something totally unique in being the only DC-to-daylight monitoring group.

I doubt that establishing frequency limits would increase this uniqueness. However, it would certainly compromise [RCMA] goals one to five, as set down on the back cover of every club newsletter.

RCMA has already been the rarest of rare -- a thinking person's radio club geared toward understanding all the photons passing through our bodies, regardless of their national origin, agency affiliation, or frequency. [RCMA] recognizes radio as physics, even when such a view rankles those lacking the nerve to run an open society.

I hope this continues.

Hugh Stegman, CA-LA-472

Dear Your Thoughts: 12 Aug 87

[The text below is from a phamplet entitled "A Word About Privacy" which was enclosed in the August 1987 Pacific Bell monthly telephone bills. It appears that every Pac Bell subscriber received a copy.]

"It is a crime under state and federal law to eavesdrop on telephone conversations. Normally, you don't have to worry about the privacy of conversations you have on telephones located in your home or business. However, if you make calls using a cellular telephone or receive calls from people who do, you need to be aware that your conversations on these phones may not be entirely private."

"Cellular telephones send calls over public radio frequencies. While it is true that calls on these frequencies may be scanned by other parties, conversations made on a cellular network are very hard to intercept because of this network's unique design, which assigns calls on a random basis to any one of hundreds of radio channels. Also, as the mobile unit moves, one radio channel may be changed to another one during a single call, so that it is almost impossible to hear an entire conversation."

"Still, there is a chance that calls on cellular phones may not be completely private. For this reason, the California Public Utilities Commission (CPUC) has asked that those placing calls on cellular telephones advise the people they are calling about the privacy issue at the beginning of each conversation. The CPUC also asked us to inform you that there are "scrambling" devices for cellular phones. These are available for purchase from many mobile phone companies and can help assure your privacy."

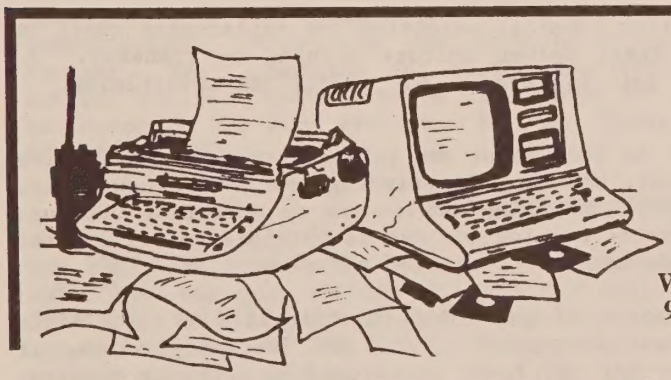
[Underlining represents italics in original text.]

Forwarded by,
Albert Nichols, RI-007

Dear Your Thoughts: 27 Aug 87

Last night I was working on my column and my wife, Mary, was reading a back issue of the newsletter and gave me what I considered to be an excellent idea. Because we (the editors) have an allocated amount of space for our column, we have a tendency to abbreviate as much as possible. Although I feel that there isn't anything wrong with this practice, my wife pointed out to me that this isn't in the best interest of new members. She made her point by asking me a question: why did I become a member of the Radio Communications Monitoring Association and other clubs like the Association of North American Radio Clubs? After thinking about it for a few minutes, the answer became obvious. I joined these clubs to become more knowledgeable about the hobby of monitoring. When members use abbreviations, along with the editors, a lot of the new members (and myself) do not know what the abbreviations mean. If we, the editors, would close our columns with a list of terms and abbreviations, it would be a great help.

Roger West, MN-052



From The CAPTAIN'S DESK

William Mauldin, RCMA General Editor
961 Azalea Street, Boca Raton, FL 33486

RCMA EDITOR GUIDELINES REVISED

We have just completed the revision of the Editor Guidelines. This document tells your staff editors what and what not to print and how to do it. It is published here for the general information of the membership, and for staff reference. I strongly

urge you, the membership, to read the Guidelines so you will have a better understanding of how our NEWSLETTER works. This document has been approved and has been mailed to the column editors.

RCMA EDITOR GUIDE AND INFORMATION
Revised August 1987

The following information is offered as a guide to assist you in the construction of your monthly column as a RCMA Staff Column Editor. Your camera ready material is printed as received, so please make our club publication look professional and neat!

1. Editors are expected to write a monthly column, without exception, devoted to the column subject assignment. RCMA Survey information indicates our members want as much subject related information as possible. Although your column can have a personal touch, personal views and chatter are not encouraged. Your primary responsibility is to devote the contents of your column to information.

2. Editors are permitted to use materials from copyrighted sources, however, this should be kept to a minimum. When copyrighted material is used, make certain you credit the source.

3. Editors are requested to devote their column space to their assigned subject. Should you receive subject material which should appear in another Editor's column, please forward that material to the appropriate Editor for printing.

4. Editors are expected to print every member submitted item, no matter how small, unless the Editor considers the item incorrect, not in conformance with RCMA Policy, or inappropriate because of earlier coverage.

5. Editors are REQUIRED, without exception, to have written contact with Carol Ruth NO LATER than the 3rd of each and EVERY MONTH! Of course, you are expected to have a column, however, should you have a personal emergency and not be able to write a column, you must reassign the column writing to your associate editor OR let Carol know that you will have NO column so your space may be reassigned! You MUST have contact with Carol each and every month. If an Editor fails to contact Carol Ruth two months in succession, the Editor will be replaced and the position reassigned.

6. As payment for your time and effort as a Volunteer Staff Column Editor, your paid membership will be placed in limbo when you are selected for the staff position. Your membership will be free during your tour of service, and your NEWSLETTER issues will be mailed to you via first class mail. Your paid membership will be continued for the time remaining once you leave the staff position. At present, this free membership is offered ONLY to Staff Column Editors, not Associate Editors.

7. The duty of the Associate Column Editor will be to collect, verify and report information directly to the Staff Column Editor for his area of assignment each and every month. Associate Editors are not required to have a word processing printer or typewriter, however, submitting material in the standard RCMA format is encouraged. Associate Editors are required to be in contact with their Staff Column Editor no later than the 20th of each and every month, without exception. Replacement, selection and assignment of the Associate Editors shall be at the discretion of the General Editor, Business Manager, and Staff Column Editor.

8. In the event of a Staff Column Editor opening, selection for replacement shall be in the following order: 1. Other Staff Column Editors wishing to transfer. 2. Associate Editors. 3. Member Editor Wait Listings. 4. NEWSLETTER advertising.

9. Our RCMA members have every right to know about new publications and directories relating to our hobby of communications, however, in printing reviews of new books, keep the review brief and to the point. Encourage publishers to advertise with us. As a non-profit organization, our ad rates are low and can be obtained by writing the RCMA Business Manager. Support publications which mention our club.

10. RCMA Policy prohibits the publication of the following things: (1.) Any officially classified or sensitive federal frequency. (2.) Any frequency which, if printed, would endanger lives or property. (3.) PL tones used to activate repeater systems. (4.) Any frequency which, if printed, would not serve to promote the common hobby of monitoring for entertainment purposes. (5.) Or any other frequency would not promote the enjoyment of the hobby or not be in the best interest of the club, if printed and distributed to the general public.

11. Editors are encouraged to use the RCMA Centerfold pullout page for surveying the general membership and collecting information. Centerfold material must be approved by the Business Manager, be submitted in the standard form, and at least four pages in length. Centerfold materials will be printed on a space available basis.

12. Editors are expected to acknowledge member submitted contributions of information. Although the club does not pay postage, it is common courtesy to acknowledge those who send you materials. Members will be constantly encouraged to send stamped, self-addressed postal cards or envelopes with requests for information. This policy also applies to associate editors.

13. Editors are encouraged to index their printed materials each for the December issue. This index should cover material by subject / issue and issue / content. The index should cover the current year and one past year, the amount of time that RCMA retains back issues for member purchase. Our RCMA Survey indicates that the membership wants a two year index reference each December. Please do your part.

ACTUAL COLUMN CONSTRUCTION

Columns should be sent to Carol Ruth, RCMA Business Manager, Post Office Box 542, Silverado, California 92676 so they will reach her NO LATER THAN the 3rd of each month, WITHOUT EXCEPTION! Please use the following guidelines:

1. Material should be in camera ready condition, written with a good typewriter or word processing printer on clean white paper.
2. Make certain there are no mistakes, no spelling errors, no smudges.
3. Minimum type size is 7 points (average typewriter characters are 10 points).
4. Typed or printed lines should fit in a space 7" justified, 7 1/2" unjustified. Material should be professionally written and spaced.
5. Make certain your printed lettering is clear and dark.
6. Maps, charts, and drawings should fit in a space 7" wide by 12" long.
7. Do not submit clipped, printed materials from other publications.
8. Do not submit doubled spaced material.
9. Number your pages in the upper, left hand corner, lightly.
10. Do not use Script style type.
11. Make certain you have credited all copyrighted sources.
12. Unless the contributing member requests otherwise, print only first name and RCMA club identification numbers.

COLUMN DEADLINES AND SCHEDULED PRINTING

All Staff Column Editors must schedule the mailing of their columns so the material will be received in Silverado, CA by the 3rd of each month, without exception. The following is a listing of deadline months as they are related to monthly issues:

Column Due 3rd	=	Printing Month	Column Due 3rd	=	Printing Month
January	=	March Issue	July	=	September Issue
February	=	April Issue	August	=	October Issue
March	=	May Issue	September	=	November Issue
April	=	June Issue	October	=	December Issue
May	=	July Issue	November	=	January Issue
June	=	August Issue	December	=	February Issue

Inquiries from the general membership or others which deal with business matters, subscriptions, advertising and printing should be addressed to the RCMA Business Manager. Policy matters and editor applications should be addressed to the RCMA General Editor. Letters to be considered for printing in the NEWSLETTER should be addressed to the RCMA Assistant Editor. These addresses are printed monthly in the RCMA NEWSLETTER.

1987 RCMA MEMBERSHIP SURVEY

Our 1987 RCMA Membership Survey will be published in the January 1988 NEWSLETTER. John Clark has been elected to write and tally the Survey information this year, and John feels we will get more and better response if we have the Survey printed in the January edition of the NEWSLETTER, a month when most of you will be spending the maximum amount of time indoors, away from the cold weather.

In years past, Bob Cheek, former Computer Corner Editor and I have written the Survey and tallied the results. This year I felt someone else should design the centerfold form, ask the questions and tally the results. John Clark has been in RCMA for many years, and he has considerable insight into the needs of the club, plus the computer

equipment and ability to design the form, ask the questions and tally the results. I am most pleased that John has accepted the assignment, and like you, I look forward to seeing the Survey in the January edition, filling in the blanks and returning the form for my vote in club direction.

When you joined RCMA, you joined a club devoted to communications monitoring. We, the volunteer staff, want to know your needs, thoughts and desires. By printing a general survey each year, we have been able to find out what you like and what you don't like about RCMA. You pay good money for your yearly membership. You should have a direct voice in how things are done within the organization. The Survey is your yearly vote on what we should change, what we should not, and what we should add and what we should delete. The form will also ask questions about you, your interests, your equipment and so on. We can serve you better if you let us know these things. Please take a minute to answer the questions when the centerfold pull out is published! As always, your input is needed and appreciated. You do not have to give your name or membership number unless you want to. But, you will give us what we need in the way of direct information if you will take a few minutes to answer the questions in January!

PHILADELPHIA NOTIFICATION NETWORK

I have been watching, with interest, the radio system that more than a half dozen monitoring buffs in the Philadelphia area are using. The PNN, as it is called, is a group of monitoring hobbyist who maintain contact with each other on a daily basis through a two-way business band type repeater system in Philadelphia. From the information I have seen, the repeater system is made up of a business band UHF repeater with most PNN members purchasing their own walkie talkie or mobile radios. The access is, of course, tone controlled.

As this article is being written, I am not certain of the frequency being used, but one article in the NORTHEAST SCANNING NEWS indicated there was some interest in obtaining a license and using a UHF business band frequency.

This is a new and rather interesting aspect in carrying your hobby one stage further. From what I have seen so far, members have notified each other of things like a refinery fire, weather alerts, travel directions, accidents were reported to local police and so on. Most members are using the new Icom U16 handhelds, and accessing the group's radio repeater which is located in Roxboro, PA. The repeater offers handheld to handheld help coverage from Philadelphia to southern New Jersey with ease.

Information on how the system works, how to join, and perhaps details and suggestions on how to set up something like this legally in your area can be obtained by writing the user group, Philadelphia Notification Network, Post Office Box 144, Rosemont, NJ 08556-0144. (This group is not affiliated with RCMA.) As always, when writing always enclose a stamped, self-addressed envelope with your information request. There is a fee for joining the group and a user charge.

I have heard of other radio groups using the UHF Class "A" Citizen Band frequencies for this purpose, however, as of this date, the PNN is the only group that we know of that is actually in operation. It will be interesting to follow and report the progress of the PNN group as their ranks grow.

PUBLICATION REVIEW FOR NOVEMBER

SCANNER FREQUENCY DIRECTORY for Northwestern Ohio & Michigan, published by Daryll Symington and RADIO INFOSYSTEMS has reached the DESK this month for review. I will have to say one thing about this 96 page book, Daryll certainly didn't leave anything out. Every frequency and user is listed in detail, both in alphabetical and frequency order by user. There are codes, maps, unit numbers, station locations, and just about everything else needed to monitor anything and everything in the coverage area. This, the 5th Edition, has an excellent data base. The details for the nine Ohio counties and 7 Michigan counties are all there. There are quite a few pages devoted to listening suggestions and monitoring tips. If you expect to do any monitoring in the areas covered, this is an excellent book to have as reference. For more information on how to mail order your copy, write to Radio InfoSystems, Post Office Box 399, Holland, Ohio 43528. Remember, send that stamped, self-addressed envelope with your information request.

RCMA welcomes the opportunity to review any and all books, directories and other publications which are devoted to the hobby of radio communications. We encourage our members to support those publications who advertise with us and that mention RCMA

as a club devoted to radio communications monitoring as a hobby.

ADDRESS CORRECTION FOR UNIDEN / BEARCAT REPAIRS

In the mail this month, Scott, one of our Florida members noted that several months ago we published an incorrect address and telephone number for the Uniden Company. To set the record straight, here is the correct address and phone number should you wish to contact Uniden or send a Bearcat scanner back for factory repairs:

Uniden Corporation
9340 Castlegate
Indianapolis, IN 46256
317-842-2483

IN THE NEWS THIS MONTH

The FCC has shut down the clandestine rock and roll radio station which has been broadcasting off the shore of Jones Beach, just east of New York City. The station which was broadcasting on 1640 AM, 103.1 FM and 6.200 MHz Shortwave had been on the air for only a short time when the FCC and the Coast Guard boarded the rusting fishing boat on July 28th, shut down operations and arrested those on board. Although outside the three mile limit, the FCC says that Section 502 of the Communications Act, Article 30, Section 266.5 of the ITU Regulations states that broadcasting shall not be permitted from ships or aircraft. As this article is being written, the W5YI Report states that the rusty ship is still anchored off the New York shore, as the anchor wench isn't strong enough to raise the anchor.

EDITOR WAIT LIST PROGRAM AND CURRENT OPENINGS

Terry Stader, Editor, Tech Topics notified us today that he is leaving the staff because of a move to the west coast and employment. We will be checking the Editor Wait List for members on file who want to join the staff and edit this column, however, if you are interested in writing the monthly Tech Topics column, drop me a note right away. The assignment might still be available.

We still have an opening for Editor, Space Communications. There are no letters on file for this subject. If you would like to write on this subject on a monthly basis, by all means drop me a note right away!

Staff Column Editors get free membership while on the staff, and their monthly issues are mailed via first class mail. You will have lots of fun and satisfaction if you join the volunteer RCMA staff, and we welcome your application for any and all positions! You are welcome to inquire about any position on the staff, and I will gladly send you an application form if you enclose a stamped, self-addressed envelope!

AIRCRAFT

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:

Darrel Charest, 7887 Brandy Circle, Colorado Springs, CO 80920

PLEASE NOTE THE NEW ADDRESS 7887 Brandy Circle, Colorado Springs, Co 80920.

Its been a hectic month. I'm not sure who originated the comment "An adventure in moving" but that's exactly what its been. When you're paying for the move yourself, then you look for ways to economize, such as rent a truck and do it yourself. It doesn't matter that the largest motor vehicle you ever drove was a pickup truck, driving a Ryder with a tow dolly and your car behind that shouldn't be all that difficult. And it isn't until you look for a refuelling place with at least a 12' canopy - so you don't readjust it with the top of your truck - and will allow you room at the pump without the towed car still being in the street. Oh yes, I almost forgot, make sure you don't have to backup because you can't do it with the tow dolly and car behind. One more thought on do-it-yourself moving. Make sure the truck is large enough. Until we finally closed the door, I wasn't certain we

would get everything in, but we did with room enough for a package of cigarettes if you looked closely. Driving the truck in Texas where its flat is one thing, driving in Colorado up and down hills is quite another. Anyway alls well that ends well and we made it - in one piece.

For the next month or so, the mail will still be routed via Texas but we will try to acknowledge your cards and letters within a few days of receipt. Some have been a week or ten days during the move, but we're nearly organized now so you can expect a reply within a short time after your letter or card arrives.

Many of you wrote during the last month and I don't think I've misplaced or lost any of them, so on to your letters.

William Tobin, NM-015, wrote with an explanation of the 720 channel radios that should clear up any misunderstandings you might have on the system. Bill writes that when he heard controllers and pilots refer to 134.82 for example, he assumed the frequency spacing was .01mhz. i.e. 134.82, 134.83, 134.84 etc. And, of course this is not the case. Spacing in the aviation band is .25mhz. When the controller or pilot refers to 134.82 what he means is 134.825 - but drops the diget 5 because both controller and pilot understand this. Only when the frequency ends in 2 or 7 is the last diget dropped, i.e. 134.875 would also be specified as 134.87. As I told Bill, I knew this and assumed everyone else did. Wrong, and that's why your input helps me and our readers. Bill also asked why aviation was the only service to use AM in place of FM in the VHF and UHF bands. An article in Monitoring Times or Popular Communications answered that question some months ago. In effect, using AM it is possible to override a signal and get a message through. When the FM transmitter is keyed on the channel, everything becomes unintelligible and this is apparently the reason AM prevails in the aviation bands where nearly everything else is FM. I should say, when an FM transmitter is keyed on an active channel, then none of it is understandable.

George Du Bois, our FCC Editor, wrote with some updated information on frequencies in the Pacific Northwest. George writes that Air Cals merger with American has resulted in a few changes. The company uses 129.2 in Seattle and 130.15 in Portland (Air Cals old frequency). 130.15 is no longer used in Seattle. So far few changes to the south, although 130.725 may be substituted for 129.45 in Washington. George asks if anyone has more recent information to let him know. United Express, a new commuter operating between Portland, Seattle and Yakima uses 130.2. Alaska Airlines went to 130.5 in Portland recently after sharing a frequency with Continental for a number of years. George makes another interesting comment on frequencies that was new to me - the UHF aviation band has now expanded to 50khz channels. As most of you know, the UHF band 225mhz to 400mhz is used primarily for military operations. Where we heard 257.6 in the past, we might now hear 256.65! Those of you who live within a reasonably close proximity of a military air base might find these bands interesting. Not only do they contain similar ATC communications found in the VHF band, you might find yourself listening to air-to-air refueling, air defense intercepts, military exercises and more. More and better receivers are coming on the market that reach these bands such as Regency, Radio Shack, ICOM and Yaesu. George seems to speculate that perhaps one day, the UHF band may also go to 25khz spacing found in the VHF segment today. As an example of the 50khz spacing, George uses the Seattle Center frequency 132.075 paired with 257.65 and in Southern Oregon 135.55 is paired with 335.55. Those of you within range might want to check these channels. George also wants to know if anyone knows who is using 128.975 or 131.375 in the Seattle area. If so lets hear from you.

Another of our Editors, Roger West, Monitoring and the Law, writes with a few channels from the Minneapolis area, and may be found at the end of the column.

Steve, Ia-056, forwarded a list of frequencies for the Arizona area for a number of services including aviation. I will extract the aviation and forward it on to our Public Service editor.

Another regular contributor, Kevin Bathrick, NY-314, sent an extensive listing of channels for his area. A number for the New York area have appeared in print during recent months, and we will try to edit those and use channels that haven't had quite as much publicity. We do appreciate these efforts even though we can't use all the material.

From Wisconsin, John P. Johnson, WI-084, writes for information on Airline Company's weather offices and frequency information for Northwest and Repuglic Airlines. John wrote that he had been watching TV news related to the NWA Detroit accident

and the fact that Northwest had its own weather center. My reply was that nearly all major carriers have their own weather centers that are usually located in the same city as the corporate headquarters. These weather offices receive their data from the same sources as NOAA and the National Weather Service. After analyzing the data the airline forecasters prepare summarys that are for use by the specific airline usually dispatchers as well as flight crews. These forecasts are usually but not always similar to those prepared by the NWS, but tailored specifically to the needs of the carrier. John also reports that he is the proud owner of a new Pro-2004 and is very happy with it. During the past six months I've had at least half dozen letters from around the country of Pro-2004 owners who share the same enthusiasm for the radio.

Mr. S. Schroeder, WA-73, sent a detailed list of UHF frequencies in response to a request from Darrell De Zarns' desire for helicopter channels in the Seattle/Whidbey Island area. Normally I would forward these to the Federal Editor, but since the request came through here, I will print them in this column. Mr. Schroeder advises if Darrell or others in the area would like to contact him, his address is: P. O. Box 2276, Mt Vernon, Wa 98273.

John J. Walsh, a new member and also an airline pilot, sent an article that appeared recently in "Airline Pilot" describing the problems dealing with navigation and air-traffic control over the oceans. The author Jan W. Steenblik cites some of the tragic results involving navigation such as the Soviet interception and downing of the KAL B-747 over eastern Siberia. Since then ICAO member countries and a number of other organizations have been searching for a better means of communication, navigation and air traffic control. The answer seems to involve satellites and though expensive, appears to offer the only satisfactory solution. Several countries as well as private companies are currently involved in the problem and some may begin testing as early as next year. John promises to become a regular contributor to the column and we look forward to hearing from him again soon.

Here are the frequencies provided by Roger West for the Minneapolis area.

122.8	CTAF Cambridge Airport	122.9	CTAF Northport Airport White Bear Lake, mn
123.3	Lakeland Aviation Rice Lake, Wi	123.5	University of Minn. Minneapolis
131.7	Northwest Orient Minneapolis Relay	131.75	Northwest Orient Minneapolis Ramp

Arizona channels from Steve, Ia-056, for the Flagstaff area.

120.0	Tower	121.9	Ground
122.95	Unicom	123.65	FSS
148.15	Civil Air Patrol		
119.0	Grand Canyon Tower	128.45	Albuquerque Center

Kevin Bathrick's list for the New York vicinity.

123.3	FSS Ulster County Airport	127.6	Apch/Departure Rockland Cty
122.8	Unicom Ulster County Airport	123.5	Use unknown Rockland Cty
121.0	Tower Orange County	122.8	Unicom Greene County Apt
121.9	Ground Orange County		
122.95	Unicom Orange County	125.0	Apch/Dptr Columbia Cty Apt
116.1	ATIS/Weather	122.8	Unicom Columbia Cty Apt
123.6	FSS Glens Falls	127.55	ARTC Center
129.8	Pan Am New York	130.95	ARINC
130.45	Scandanavian Air NY	131.525	ARINC
129.4	TWA New York	131.75	ARINC
129.65	TWA New York		
129.35	United NY	120.05	Apch/Dptr McArthur Long Isl.
		121.7	Ground McArthur Long Island
120.1	Apch/Dptr Trumbull, Ct	124.3	Tower McArthur Long Island
121.9	Ground Trumbull, Ct		
125.4	Tower Trumbull, Ct	124.8	Tweed-New Haven, Ct

Here is the UHF list forwarded by S. Schroeder, Wa-73

336.40	Ground	NAS Whidbey	381.80	Port Angeles	
340.20	Tower Primary	NAS Whidbey	282.80	Search & Rescue	Common
360.20	Tower Secondary	NAS Whidbey	34.15	SAR Helo	Oak Harbor
360.90	Firewood Base	NAS Whidbey	244.40	ASF	Operations
286.00	Departure Ctl	NAS Whidbey	123.05	ASF	Operations
266.80	Apch Control	NAS Whidbey	38.5	ASF	Maintenance
270.80	Apch Control	NAS Whidbey	266.20	Bangor	Primary
350.00	Bremerton		315.30	Bangor	Secondary
380.80	Clrnc Dly	NAS Whidbey	257.80	Boeing	King County
306.90	ARTC Center	Seattle	360.20	Boardman Bombing Range	
319.20	ARTC Center	Seattle	381.80	Coast Guard Cutter	Primary
263.10	Apch Ctl	Seattle	282.80	Coast Guard Cutter	Secondary
338.20	Dptr Ctl	Seattle	277.80	Fleet Common	
290.90	Apch/Dptr	Grey AAF	248.20	Tower	Grey AAF Ft Lewis
391.90	Apch/Dptr	McChord AFB	241.00	Tower	Grey AAF Ft Lewis
255.40	FSS	Seattle	126.20	Tower	Grey AAF Ft Lewis
344.60	Metro	NAS Whidbey	229.50	Ground	Grey AAF Ft Lewis
232.70	Tower	Vancouver, BC Canada	121.90	Ground	Grey AAF Ft Lewis
294.50	ARTCC	Vancouver, BC Canada	259.30	Tower	McChord AFB
352.70	Apch	Vancouver, BC Canada	257.80	Ground	McChord AFB
363.80	Dptr	Vancouver, BC Canada	229.40	Tower	Paine Field
236.60	Tower	Vancouver, BC Canada	256.90	Tower	Renton
275.80	Ground	Vancouver, BC Canada	124.70	Tower	Renton
239.60	Tower	Victoria, BC Canada	239.30	Tower	Sea/Tac
361.40	Ground	Victoria, BC Canada	241.20	Tower	Tacoma Industrial
121.90	Ground	NAS Whidbey Island	118.50	Tower	Tacoma Industrial
126.20	Tower	NAS Whidbey Island	290.90	Apch	Tacoma Industrial
118.20	Apch W	NAS Whidbey Island	120.10	Apch	Tacoma Industrial
120.00	Apch	NAS Whidbey Island	295.00	Tower	Abbotsford, BC Canada
126.05	Tower	NAS Whidbey Island	358.10	Tower	Comox, BC Canada
153.305	Hi-Line Helicopters	Darrington			

If my plans bear fruit next months column should be on a computer with larger, easier to read print.

AMATEUR RADIO COMMUNICATIONS

This column is for reporting on amateur radio activities that may be of interest to scanner listeners. Send reports and questions concerning repeater nets, civil emergency systems, packet radio, amateur TV, etc., to:

Gordon West, 2414 College Drive, Costa Mesa, CA 92626

"NOVICE 10 METER PRIVILEGES" by Gordon West

Never before in the history of amateur radio has the Novice beginner operator had voice and computer privileges on a worldwide band. About a decade ago, Novice operators did have voice privileges on the 2 meter band, 144-148 MHz, but range was limited, equipment scarce (back then), and when the license ran out, so did the privileges. The FCC eventually abolished 2 meter Novice voice privileges because there was little uptake on this relatively unpopulated VHF band.

This time Novice class operators are letting the FCC and the amateur radio community know how much enthusiasm they have for their new voice-class privileges. Some Novice operators go directly to the 220 MHz repeater band. Others explore the new frontier at 1270 MHz. The majority start out with worldwide privileges on their newly allocated 10 meter band--28.100 MHz through 28.500 MHz.

THE 10 METER NOVICE SUB-BAND

400 kHz has been allocated to the Novice operator on 10 meters. This is more elbow room than the entire amateur radio 20 meter band! 400 kHz is more than three times the amount of room that a General class ham radio operator is allocated for voice privileges on the world-wide 20 meter band. 400 kHz on 10 meters for Novice operation is plenty.

Licensed Technician class operators also receive the same privileges as the Novice operator on 10 meters, too. If you have a current Technician class license, you can go on the Novice portion of 10 meters immediately! General class, Advanced class, and Extra class operators have also flocked to the Novice sub-band on 10 meters to give the new operator a hearty welcome. Chances are your first contact on 10 meters won't be with another Novice--but quite possibly an Extra class ham giving you the big welcome.

28.100 MHz to 28.300 MHz is reserved exclusively for Morse Code (CW) and digital-computer communications. Maximum power output maybe up to a whopping 200 watts P.E.P. 28.300 MHz to 28.500 MHz is expressly reserved for single sideband voice transmissions in this Novice sub-band. While CW is allowed anywhere within any amateur radio band, all you'll hear between 28.300 to 28.500 MHz is wall-to-wall worldwide voice communications using upper sideband. Again, power output is up to 200 watts. Most ham transceivers put out 100 watts, so you have room to spare.

Radio teleprinter (RTTY) transmissions are found at the extreme bottom of the Novice sub-band. 28.100 MHz to 28.150 MHz will be filled with the familiar sounds of radio transmission via the keyboard. If you have an RTTY decoder, the typical speed is 66 baud which equates to about 75 words per minute. Tune your receiver up and down until the message begins to make sense. If the transmissions sound like two birds chirping, the Novice operators may be sending AMTOR, another form of digital communications that allows for self-checking of the copy as they go. If the sounds you hear seem like RTTY, but at a faster rate, try 110 baud ASCII, another popular form of digital communications by the Novice operators. Although slow-speed packet may also be found down at the bottom of the band, this type of digital communications is generally reserved for the Novice on 220 MHz and 1270 MHz bands.

28.150 MHz to 28.300 MHz will lead you to the sounds of Morse Code. The Novice operator wishing to exchange communications usually try his luck between 28.150 MHz to 28.200 MHz. Here's where you might find some shakey CQ's going out on the air.

28.200 MHz through 28.300 MHz is a fascinating slice of spectrum that amateur radio operators use to determine 10 meter worldwide propagation. This is the 10 meter "beacon band" that is home for over 100 worldwide propagational beacons transmitting constantly with their respective country call sign. Every beacon is on a slightly different frequency to allow hams interference-free reception of the call sign and identifier of that particular beacon. As an example, here are five beacons that are easily received when the band is open to that particular portion of the world:

FREQUENCY	CALL SIGN	LOCATION
28.200 MHz	KF4MS	St. Petersburg, Florida
28.215 MHz	GB3RAL	Slough, United Kingdom
28.250 MHz	Z21ANB	Bulawayo, Zimbabwe
28.264 MHz	VK6RWA	Perth, Australia
28.290 MHz	VS6TEN	Mt. Matilda, Hong Kong

Most beacons send their CW identifier slow enough that you can easily copy it at Novice level code speeds. Their transmissions are continuous so you can decipher it several times. Typical power output is only 20 to 30 watts, so if you can hear the beacon, chances are you can work that country easily with 100 watts of power. For the complete list of 10 meter beacons, send a self-addressed stamped envelope to Radio School "Beacons", 2414 College Drive, Costa Mesa, California 92626. It's free.

28.300 MHz to 28.500 MHz is the hot bed of amateur radio 10 meter single sideband activity. Almost all hams, including General, Advanced, and Extra, have flocked to the bottom portion of the band to find some real activity on voice. The mode is upper sideband exclusively. Novice and Technician class operators are not allowed to

transmit AM or double sideband on 10 meters. Double sideband transmissions are just about dead on any ham band, too. Tune around 28.400 MHz as your starting point for a single sideband contact. This frequency, in the middle of the voice band, has become the unofficial meeting spot for new operators. If your shortwave receiver or worldwide ham set has squelch, dial up 28.400 MHz, set the squelch, and expect some action during daylight hours.

PROPAGATION

As we begin our climb up solar cycle 22, long-range skywave propagation will become an almost daily occurrence. The maximum usable frequency (MUF) dramatically increases with the peak of the next solar cycle in 1990, so things will only get better for 10 meters over the next few years. F2 skip is what we use for bringing in those worldwide stations.

Short skip usually bounces off the daylight E-layer. E-layer skip is almost a daily occurrence during the summertime, and is a very common occurrence during the morning and afternoon/evening hours here in the winter. Signals are exceptionally strong, but take a characteristic deep fade about every 30 seconds. The fade lasts only a second or two, so don't be discouraged. The station will immediately come back up to its original strong signal strength. After awhile, you'll recognize these quick deep fades as life in the fast lane on 10 meter E-skip.

With a good outside directional antenna, groundwave reception and transmission on 10 meters goes out to about 100 miles. Groundwaves are uneffected by day or night, fall or winter, hot or cold. You either have it with a good antenna, or don't have it with a not very good antenna. Citizens Band base and mobile antennas make wonderful 10 meter antennas with just a little pruning. In fact, you could use your existing Citizens Band antenna quite nicely on 10 meters right now without doing a thing.

Other forms of 10 meter excitement might be propagated off of meteor trails. There is also great aurural skip if you live up north on 10 meters. Strong inversion layers will also lead to enhanced range on 10 meters. And one of the best parts about this band when it comes to propagation is the fact that antennas are relatively small for worldwide reception on these frequencies. Power line noise and atmospheric static are also low on 10 meters, too.

PRECAUTIONS

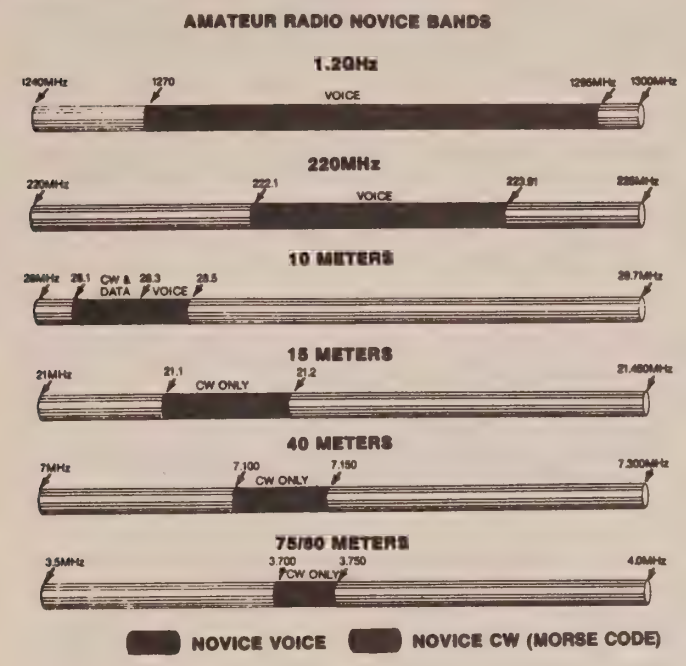
Don't go on the air until you have received your Novice call letters. It takes only about 4 to 6 weeks after you have passed the test and have your two ham buddies send in the FCC Form 610. You can listen, but don't transmit!

Don't transmit 28.200 MHz through 28.300 MHz. This is reserved for propagation beacons. Eventually, this beacon band will move down a little bit in frequency.

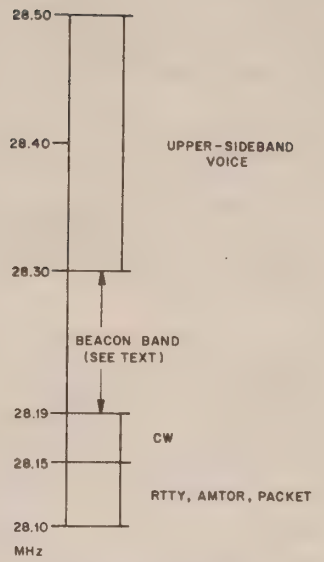
Don't operate voice above 28.495 MHz. Your upper sideband signal will swing up 3 kHz in addition to this frequency, and you don't want to transmit out of band.

Watch your second harmonic. Two times your fundamental frequency puts you right in the middle of television Channel 2. Low-pass filters on the ham set plus a high-pass filter on the TV should clean up the problem--but I wouldn't recommend transmitting on 10 meters during the Super Bowl.

Finally, watch out for 10 meters--it's addictive. When the band opens every morning at about 6:00 a.m., there's no telling where the short or long skip will take you--other than to the east in the mornings, north and south in the afternoons, way west in the early evenings, and possibly over the Poles around midnight. Operating near the top of the maximum usable frequency gives hams the very further skip, so where it's at is on 10. Hear you all on 28.400 MHz!



Courtesy of ICOM



Courtesy of AARL

BEGINNER'S CORNER

If you are new to monitoring or have a question about something you don't understand, please write to me at the address given below, and I'll try to answer you. When posible, your questions and answers will be printed. For those who wish an immediate reply, please send a self-addressed, stamped envelope.

John P. Leth-Nissen, Rt. 1, Box 101, Benton, KS 67017

YOUR MAILBOX: Another month approaches history and with the onset of school there may once again be time for monitoring. As the column evolves, the mailbag is beginning to show some interesting patterns. Each month the number of inputs increase, but about half of the letters are from 'repeat BC customers.' At least a part of the CORNER is becoming like a loose-knit family with a lot of ideas and notions being traded. Another feature is that while the mailbag is getting steadily heavier, to date only the continental U.S. has gotten into the act. BC gives special thanks to all that have participated and encourages both new and repeat business. As always, each input gets a direct response (no waiting) and stuff of general interest ends up in print.

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SUPPLEMENTARY INPUT: CATO-002 advises that a book called Information **Seekers Guide**, subtitled How to Find Information at F.C.C. is available upon request from your local FCC office. He received a copy along with a GMRS license application and has found it to be a useful resource.

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INQUIRY - Continuing inquiries on the basic idea behing repeaters so here's a bit more.

RESPONSE - The basic premise behind repeaters is that mobile/portable radios have limited reliable transmission range (low-power and antenna line-of-sight limitations.) Base stations with high power and an elevated antenna have much broader coverage. To extend non-base transmitter range, mobiles typically transmit on a different (repeater input) frequency. Remote towers on mountains, tall buildings, etc.s receive this input and simultaneously rebroadcast on the base station

frequency. The main base transmits and receives on the base freq. and the mobil units receive on the base frequency. All traffic can be heard and monitored on that base frequency.

There are a great number of variations and combinations available by switching and cross connecting repeater systems. Special inter-agency temporary networks can be made by activating configuaration switches. For example, a sheriff dispacher may access and transmit on a local PD repeater input frequency to send emergency messages (APBs) or coordinate an emergency response to both agencies (all units) simultaneously.

HAM radio groups also use repeaters in various ways. Even beginners (Novice Licensees) that are held to low-power and a limited choice of frequencies, are able to access some group repeaters and talk over long distances. While they can only talk on a few channels, they are not restricted from monitoring the repeater output frequency that carries all the traffic. Some of the more sophisticated repeaters have 'AUTO-PATCH' capability which allows mobiles to access the automated repeater and make telephone (patch) calls. A real convenience for those Hams on the go. Incidentally, some repeaters are listed in the AARL Repeater Directory as RACES, REACTS, SKYWARN or some other emergency designation. You should make it a point to find the local Ham repeaters in your area, as during emergency/civil disaster events, these repeaters go public into public service and provide invaluable info.

RADIO TELEPHONE (Not cellular) was a common utility application for repeaters. Simply put, if your mobile phone was in line of sight to a telephone repeater, you could contact a mobile operator that would patch you into the land-line system. These repeaters (radiotelephone) is still the prevalent system, so just tune into a local telephone repeater to monitor both sides of the traffic.

BUSINESS RADIO Larger companies may operate a repeater system, while smaller companies often share a common (community) repeater. As with the above, all traffic can be heard on the repeater output frequency.

CELLULAR TELEPHONE Now comming of age, this technology is not as easy to deal with. This technology is basically a marraige of a group of repeaters (on different in/out frequencies) that are polled and managed by a computer. Data management is conducted on a prescribed frequency and the computer selects which repeater/mobile pairing provides the best communications channel. As a mobile moves around, its signal is continuously polled and the computer will order it to switch to another repeater any time a better match is found. This switching is fully automated and happens so quickly that the user cannot detect it. If you are monitoring cellular, you will need to load all local repeater frequencies except the control channel and resume scanning when a hand-off is made. This technology makes monitoring a somewhat more difficult, albeit not impossible.

TRUNKED SYSTEMS As mentioned on numerous ocassions in the newsletter, this cellular technology is an advancing marraige of radio repeaters with computers (see Mauldin's column in a recent newsletter.) These systems can be next to impossible to monitor if they are large and/or if they are driven by software designed to insure privacy. By way of philosophy, mass production micro-electronics make these systems an economical practicallity for may users and this technology may be expected to spread like wildfire among all descriptions of users as well as those really entitled to privacy. I recently read of a police department that couldn't tap drug dealer's telephones as they were operating on a cellular trunked system. I would suspect that the micro-electronics needed to moniter a great variety of trunked systems will become available as this technology becomes more widespread. In the meantime, if your currently monitoring East-Bay or Stockton radio traffic, you should expect increasing difficulties in the next couple of years.

FINDING THE REPEATER A number of publications, including backissues of the RCMA newsletter provide a catalogue of common frequency pairings (400 MHz range) and Cellular ('A' and 'B' systems) repeater channels.

If you don't have the appropriate backissues, go to the nearest Radio Shack and get the 1987 Edition of Police Call Radio Guide. For those pairings that are not predetermined by regulation, base and mobile pairings are usually close together (typically less than 5 MHz and often less than 1 MHz apart.)

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INQUIRY - Several requests this month concercing acronyms (abbreviations) that go with the hobby. Here's a sample and if I get a few more requests I'll build a 'glossary file' in my computer and make the list available SASE on request.

DX - Is a technical abbreviation for 'distance'. In current usage a DXer or DX hound refers to amateurs that specialize in making distant contacts. In a more general sense, all those that monitor long distance communications. DXers live for those days when solar activities cause 'skip' conditions. During those periods, radio waves bouncing back from the upper atmosphere can propagate to unheard of ranges.

HAM - A licensed 'amateur' radio operator. This license covers individuals interested in the technical side of radio and is called amateur because it is strictly non-commercial; no business, not even personal business may be transmitted. Hams have worldwide communications capacities using telegraphy, voice, teleprinting, television, and facsimile as regulated on about 21 different radio frequency bands. Hams are sometimes the primary communications channel during disasters and their RACES (Radio Amateur Civil Emergency Service) network frequencies are a 'must have' for monitoring types. Five classes of License are Novice, Technician, General, Advanced and Amateur Extra.

ITINER - Most commonly the abbreviated form for Itinerant Frequency. The FCC has allocated certain frequencies for what is classified itinerant operation. Itinerant licensces may be issued for operation within a singal state, group of states or the entire United States. Common applicants for these frequencies include on the road types like news, sporting and entertainment industries as well as clubs, resorts, universities any any number of licensees that don't fit into one of the other licensce catagories.

73's - One of the standard ten-code symbols used by amateurs. A cordial goodbye and best wishes is a good approximation. The Citizens Band Radio slang is 'Good Numbers to you' which is supposed to mean 73's and all other types of ten-code good wishes.

SSB - Refers to radio transmission in the SINGLE SIDEBAND BROADCAST mode. This term is not easily defined as it is a fairly sophisticated approach. It is really necessary to have some basic understanding of full band AM-FM transmission waveforms first to keep reading BC and I'll get to SSB down the road.

SW - The abbreviation for short wave. Radio waves in the frequency spectrum between 1.6 MHz and 30.0 Mhz, which fall above comercial broadcasting and are best suited for skywave communications over long distances. Amateurs and International Broadcasts like BBC thrive in this DX domain. Citizens Band Radio with a typical range of 15-20 miles is centered around 27 MHz. On the right type of day you may stumble into somene from California talking to someone in Florida on a mere 4.5 Watts of power.

MODE - Means different specific somethings to different people depending on where the conversation takes place. In radio it is often used to discrible the type of radio signal transmitted or received. AM-Amplitude Modulation, FM-Frequency Modulation (Could be Wide or Narrow-Band), SSB-Single Side Band (could be Upper or Lower Side Band), etc., etc.

MW - The one I'm most familiar with is the technical abbreviation for Mega Watt. The Watt is a basic physics unit for measuring power. Mega

is the scientific prefix (powers of ten notation) for one-million. A multi Mega Watt transmitter must be classed as a very powerful electro-magnetic wave source. Also the abbreviation for Medium Waves in the rf spectrum between 300 KHz and 1.6 MHz.

LW - The abbreviation for Long Waves. Refers to radio frequency (single) wavelengths longer than one thousand meters. These would be signals below 300 KHz. One of the more notable types of communications applications in this spectrum is submerged submarines thousand of miles out a sea talking to a domestic longwave station. The sub pulls a cable serveral miles long which acts as the antenna.

QSL card - Typically a postcard exchanged by radio amateurs to confirm radio communications with each other. Often, operators have personalized postcards with logos, drawing and other paraphinalia refering to their station. Call sign and location as usually imprinted and the back of the card contains written data confirming the contact. DXers and monitor also write to verify long distance reception and receive a similar type card.

MF - MEDIUM FREQUENCIES 300-3000 KHz (3MHZ)
HF - HIGH FREQUENCIES 3-30 MHz
VHF - VERY HIGH FREQUENCIES 30-300 MHz
UHF - ULTRA HIGH FREQUENCIES 300-3000 MHz (3GHZ)

Multipliers K=Kilo times one thousand
M=Mega times one million
G=Giga times one billion

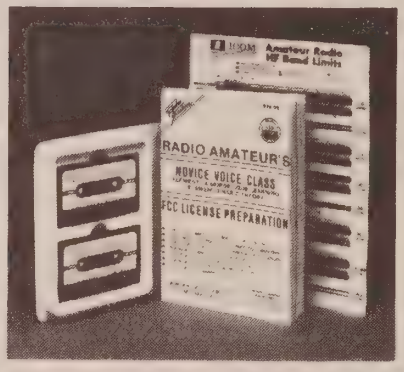
RTTY - A specialized form of amateur communications using a keyboard to transmit character codes. May be received and output to a printer or video screen.

NOTE - Good news is it doesn't take a lot of terms to get a handle on this hobby. Better news is that it never gets boring cause there's always more to come.

John KS-036

Gordon West's

21 DAY NOVICE



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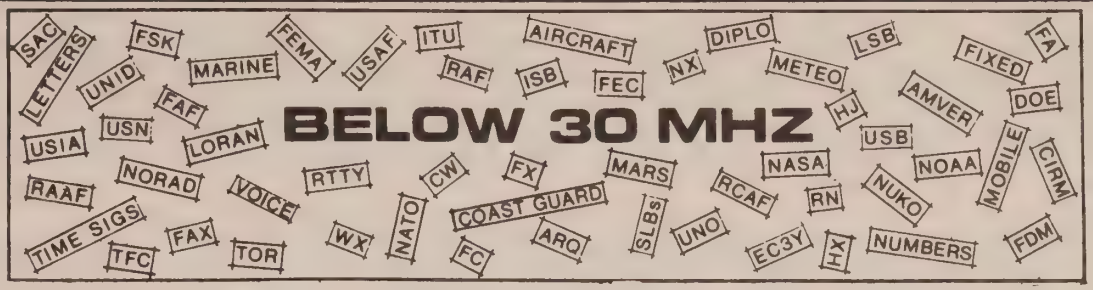


This column is for HF AM, CW, SSB,RTTY and FAX reception reports, notes, articles, and questions related to HF utilities. Services covered in this column include aeronautical, coastal/marine, weather, government, military and 'spy' stations—essentially everything except broadcasting, CB and amateur radio.

Hugh Stegman, 4354 Coolidge Ave, Los Angeles, CA 90066

Peace is our Profession

A number of members, especially Rick (CA-LA-544), have reported hearing U.S. military traffic on 6761 and 9027 KHz, USB. They noted the periodic "SKYKING" broadcasts. These listeners have run across frequencies "Quebec" and "Romeo" of the Strategic Air Command.

SAC frequencies aren't really sensitive, but the traffic on them most definitely is. Few things in life are just like the movies, but this is one of them. In a very real sense, they are indeed playing Global Thermonuclear War. SAC maintains a credible deterrent through a constant state of readiness, practicing over and over again.

SAC traffic is coded. The callsigns are changed daily, and they come from random lists of words. The usual laws about divulging communication definitely matter here. Don't even THINK of QSL'ing SAC bases.

"SKYKING" broadcasts are most likely coded orders or bulletins from ground stations. "SKYBIRD" indicates an initial callup by an aircraft, usually an aerial tanker. "JJ Weather" and "JJ Adbar" are observations from tankers or bombers, using coded lists of items.

A callsign of the type "Woozy 1-7" is an aircraft, while ground calls are two or three syllables. Phone patches are common. There are always two tones on unkey, and the long-delayed echoes sound like satellites feeding the Giant Talk network.

For me, the recent heavy activity heard by these members indicates some sort of major exercise. These are common. I heard some of the wilder parts, complete with buzzsaw noises (jamming?) and one couple on 6761 having a real out-and-out lovers' quarrel! More practice QRM?

None of this is very enlightening, but it is fun to hear a really well-trained radio net do its job. Also, there is a certain ominous fascination to it all. A game, but a very necessary one, and SAC does it well.

SAC Frequencies (KHz):

4725	Victor	13241	Sierra
6761	Quebec	15041	Mike
9027	Romeo	17975	Tango

There are others, but these seem to be the most active.

More Military Radio:

Inveterate knob-twirlers have run across a lot of U.S. military comms without knowing what they have. In fact, a lot of the "funny noises" on HF are actually some pretty serious data or encrypted pictures. (Though SAC is straight USB.)

Many U.S. comm sites now have the C31 format, allowing full independent sideband emission. There are 16 multiplex channels, in four sidebands. Full mixing of baseband modes is possible, meaning that perhaps 8 RTTY transmissions, some slow-scan pictures and a voice intercom are on one huge signal! This stuff is about 12 KHz wide, and the voice (if any) tends to be in the channel that typical hobby-class receivers pick up as LSB.

Other times, these signals sound like closely spaced buzzes as you tune through them. The "cluster" monitored by Bob Horvitz around 6800 KHz was typical, and was easy to ID even before the LSB voice of "Acrobat Switchboard" (USAF) was heard.

The latest ionospheric sounders and spectrum analyzers may be used to find dead spots with the best propagation. All the radios instantly go there, and power is then cut to the minimum. The antennas are broadband designs like log periodics and the huge "elephant cage" (a folded, wire discone).

Spread spectrum communication, in which the frequency hopping is done so fast that it must be synchronized by computers, is being seriously investigated. Normal receivers cannot detect these signals at all, except as an imperceptible rise in the noise floor. Also, the new "PARK HILL" format uses full, digital scrambling of everything. In any event, there may be a lot less "accessible" military comm to monitor in a few years.

Getting Spooky

Halloween could not go by without an update on the 13267 KHz "spook." Happily, he is getting the hang of it. He has discovered "cut" numbers, sending the letter "o" (three dahs) for zero (five). He does indeed have a VFO on his (still very sick sounding) radio. When he drifts too far off frequency, he swishes it back on while sending a long dah. Then he does his "2V" ID a few times, and goes on with the night's traffic. (Night, L.A. time... the sked is still at 0445 UTC).

Meanwhile, another sked has appeared around 13194 KHz, or right on top of a busy marine channel. On 21 Aug (UTC) The Spook came up here, contributing nothing but QRM before slinking back to 13267. Stations on this frequency use the same 4# message format and callsigns as on the other. One sounds very chirpy, and has a bad click on "make." He sounds as if he is sending with a huge, bouncing ball. Yow!

Plan Your Listening (pt. 1):

HF can be intimidating, but it should not be. Not everyone wants to invest as much time and money as some ace DX'ers, but it should not be hard to plan your listening and hear nearly as much as these guys.

The best way to pick a receiver is to look at all of them and find one you like in your price range. Try them all out. Look for stability and frequency accuracy. For utilities, you want to be able to log frequency very accurately. Use time stations to check this.

Used radios should be checked out pretty carefully. There are also a lot of old tube radios out there selling practically as junk. These can outperform all but the newest solid state sets, but they are not for the absolute beginner. Typically, they are hard to tune and operate, and if anything goes wrong you may be on your own. Tubes are not impossible to find, but they may be expensive.

While it is impossible to fool mother nature, she can be played with a bit. Books will give directions for all sorts of super signal snaggers, and these are indeed very good antennas if you have the room. Otherwise, most new receivers (or old ones with preamps) have enough front-end gain that they will do OK on any length of wire you wish to hook them to.

Apartment SWL's have done just fine running wires out to trees, or around the inside walls of rooms. Use a good preamp/ preselector to tune these and make up for their shorter length. Such a homebrew wire can work as well as the expensive active antennas now being marketed, though any indoor antenna will be noisier.

Turn on your box and find out where the activity is. Get a list of utility band allocations and pick some bands that look interesting. Notice how propagation changes predictably at different times of day.

I have sent Carol a copy of the band list I use, although I don't know when there'll be space for it. Other ones are available in books and magazines such as Popular Communications and Monitoring Times. We'll talk about propagation forecasting and time zones next time. See you!

BUSINESS, ETC.

This column is for reporting frequency and radio system information for the following services: business, forest products, petroleum industry, special industrial, manufacturers, motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.) and all school & college related frequencies.

Send business monitoring information west of the Mississippi to:
Cliff Polkinghorn, 2580 Parkside Drive, Union City, CA 94587

WELCOME TO THE NOVEMBER 1987 EDITION OF THE BUSINESS WES" COLUMN. WE DID RECEIVE A NICE LETTER. AND FREQUENCY LIST FROM DARRELL WA 080. BE ADVISED THAT THIS IS A LIST OF FREQUENCIES APPLIED FOR, BUT NOT NECESSARILY APPROVED AND/OR PUT INTO SERVICE.

LOGGING COMPANIES

47.96	M.A.C.* TRUCKING	TROUTDALE OR.
48.32	M.A.C. TRUCKING	TROUTDALE OR.
48.20	KENDLE TRUCKING	MEDFORD OR.
49.00	KENDLE TRUCKING	MEDFORD OR.
452.85	KENDLE TRUCKING	MEDFORD OR.
457.85	KENDLE TRUCKING	MEDFORD OR.
48.58	WASHINGTON CONTRACT LOGGERS	OLYMPIA WA.
49.08	WASHINGTON CONTRACT LOGGERS	OLYMPIA WA.
48.64	WASHINGTON CONTRACT LOGGERS	OLYMPIA WA.
48.80	STEVE JACKSON LOGGING	KALAMA WA.
49.20	STEVE JACKSON LOGGING	KALAMA WA.
48.80	WILLIAMETTE FOREST SYSTEMS	INDEPENDENCE OR.
49.20	WILLIAMETTE FOREST SYSTEMS	INDEPENDENCE OR.
48.84	WASHINGTON CONTRACT LOGGERS	OLYMPIA WA.
49.22	WASHINGTON CONTRACT LOGGERS	OLYMPIA WA.
48.96	VAN METER LOGGING	REDWAY CA.
49.54	VAN METER LOGGING	REDWAY CA.
48.96	Z & N LOGGING	BELLINGHAM WA.
49.38	Z & N LOGGING	BELLINGHAM WA.
153.050	ANDERSON LOGGING	FORESTVILLE CA.
153.095	BLUE LAKE FOREST	BLUE LAKE CA.
153.110	WILLIAMETTE INDUSTRIES	ALBANY OR.
158.205	WILLIAMETTE INDUSTRIES	ALBANY OR.
153.125	R. FRANKLIN CORP.	LEBANON OR.
153.185	K. WERNER REFORESTATION	TILLAMOOK OR.
153.200	WILLAIM D NELSON TRUCKING	EMMETT ID.
153.32	NEILSON-FERRARI LUMBER	PLACERVILLE CA.
153.365	CONSOLIDATED PAPERS	WISCONSIN RAPIDS WI.
153.38	FANBERG & SON LOGGING	MASON WI.
154.600	LEWIS LOGGING CO.	RED CREST CA.
154.570	LEWIS LOGGING CO.	RED CREST CA.
157.740	MCDOUGAL BROS. INC.	DEXTER OR.
153.095	MCDOUGAL BROS. INC.	DEXTER OR.
153.365	LONG ISLAND DEVELOPMENT	KETCHIKAN AK.
157.740	LONG ISLAND DEVELOPMENT	KETCHIKAN AK.

158.280	NORTH STAR FOREST	FAIRBANKS AK.
452.275	NORTH STAR FOREST	FAIRBANKS AK.
457.275	NORTH STAR FOREST	FAIRBANKS AK.
158.325	LOUISIANA PACIFIC CORP.	PORTLAND OR.
160.455	H. M. INC.	EAGLE POINT OR.
161.415	H. M. INC.	EAGLE POINT OR.
451.650	CONSOLIDATED PAPERS	WISCONSIN RAPIDS WI.
456.2375	QUALITY TIMBER REMOVAL	PHILOMATH OR.
456.6375	QUALITY TIMBER REMOVAL	PHILOMATH OR.
462.475	POTLATCH CORPORATION	LEWISTON ID.
467.475	POTLATCH CORPORATION	LEWISTON ID.
462.475	WEYERHAEUSER CO.	TACOMA WA.
467.475	WEYERHAEUSER CO.	TACOMA WA.

ALL ABOVE WERE APPLIED FOR IN DEC 86

29.77	ROESLER TIMBER	STARTUP WA.
49.08	WASHINGTON CONT.	OLYMPIA WA.
153.14	INT'L PAPER	DALLAS TX.
153.185	SPALDING LOG	SEDRO WOOL WA.
153.305	HANEL LUMBER	HOOD RIVER OR.
160.425	H.M. INC.	GRANTS PASS OR.
161.415	H.M. INC.	GRANTS PASS OR.

ALL ABOVE WERE APPLIED FOR IN JAN 87

48.76	BASCO LOGGING INC.	WINCHESTER OR.
49.44	BASCO LOGGING INC.	WINCHESTER OR.
49.10	JIM WOOD TRUCKING	NEVADA CITY CA.
153.20	BRITT LUMBER CO.	ARCATA CA.
153.245	G & S LUMBER CO.	NACAGDOCHES TX.
158.415	G & S LUMBER CO.	NACAGDOCHES TX.
153.38	FANBERG & SON LOG.	MASON WI.
154.57	JOE ZENDER & SONS	DEMING WA.
154.600	JOE ZENDER & SONS	DEMING WA.
160.425	COBRA CONST. LOG.	GRANTS PASS OR.
161.415	COBRA CONST. LOG.	GRANTS PASS OR.

ALL ABOVE WERE APPLIED FOR IN APRIL 87

47.72	HALEY CONSTRUCTION	BROWNSVILLE OR.
48.22	HALEY CONSTRUCTION	BROWNSVILLE OR.
48.58	WASHINGTON CONT. LOG.	GLACIER WA.
49.16	WASHINGTON CONT. LOG.	GLACIER WA.
48.68	WASHINGTON CONT. LOG.	SEDRO WOOLEY WA.
49.22	WASHINGTON CONT. LOG.	SEDRO WOOLEY WA.
49.00	KENDLE TRUCKING	MEDFORD OR.
153.065	G. SCHEUERMAN LOG.	SILVER CLIFF WI.
158.280	G. SCHEUERMAN LOG.	SILVER CLIFF WI.
153.065	SILLER BROTHERS	CA. OR. & WA.
153.365	SILLER BROTHERS	CA. OR. & WA.
153.230	WELDON REYNOLDS	ASHTON ID.
158.310	WELDON REYNOLDS	ASHTON ID.
153.245	BERNIE NOWAK, INC.	SILVER CLIFF WI.
158.415	BERNIE NOWAK, INC.	SILVER CLIFF WI.
153.350	BARGER LUMBER	CORNETTSVILLE KY
153.350	KOMM LIGGING	E. WENATCHEE WA.
153.395	JIM MATCHERR TRUCK	TALENT OR.
154.625	BRIGGS & SILVEY FOR.	PRINEVILLE OR.
158.295	BRIGGS & SILVEY FOR:	PRINEVILLE OR.
158.295	PRAIRIE MTN. RADIO	COTTAGE GROVE OR.
159.735	PRAIRIE MTN. RADIO	COTTAGE GROVE OR.
451.175	COLUMBIA HELICOPTERS	STATE OF OREGON
456.175	COLUMBIA HELICOPTERS	STATE OF OREGON
451.225	COLUMBIA HELICOPTERS	STATE OF OREGON
456.225	COLUMBIA HELICOPTERS	STATE OF OREGON
451.575	ASSOCIATED OR. LOG.	WESTERN IDAHO
451.625	ASSOCIATED OR. LOG.	WESTERN IDAHO
451.675	ON SONDE COMM.	SOUTH BEND IN.
456.675	SN SONDE COMM.	SOUTH BEND IN.
451.6875	CAFFALL BROS. FOREST	WILSONVILLE OR.
456.6875	CAFFALL BROS. FOREST	WILSONVILLE OR.
451.700	ASSOCIATED OR. LOG.	WESTERN IDAHO
456.700	ASSOCIATED OR. LOG.	WESTERN IDAHO
452.100	COLUMBIA HELICOPTERS	STATE OF OREGON

BUSINESS, ETC. continued

457.100 COLUMBIA HELICOPTERS STATE OF OREGON
452.850 KENDLE TRUCKING LINCOLN OR.
ALL ABOVE WERE APPLIED FOR IN OCT 86

THATS IT FOR THIS MONTH

Send business monitoring information east of the Mississippi to:
Brandt Niemuth, P.O. Box 541, Rosemont, IL 60016

Greetings from the 'Hot Air' city of chicago area. From fellow editor Roger West comes the following material;
Metropolitan Transit Comm. (Minneapolis - St Paul)
453.275 453.925
453.55 453.975
453.825
151.685 Dealers Overload Milltown Wi
151.895 Super Locker Frederic Wi
153.455 N S P Amery Wi
157.47 Clear Lake Auto Clear Lake Wi
151.835 Apple River Rec Area Somerset Wi
151.895 Riverdale Campgrounds Somerset Wi
Chicago Area Update;
461.85 ABA Limousine - Glenview
463.75 BC Express - Elk Grove
461.55 Gamma Photo - Chicago
151.895 Des Plaines Auto Salvage
463.475 Northwestern University (Evanston) - Security
464.475 Northwestern University (Evanston) - Maintenance

RCMA has a Telephone Number

The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.

Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor listening and questions to:

Rob Berezowski, 310-4045 Rae St, Regina, Saskatchewan, Canada S4S 6Y8

Greetings from Regina and welcome all to the November Canada column. Seeing the word November sends cold chills up my spine. It's a reminder that winter is just around the corner. This also means that the 1988 Calgary Winter Olympics are not far away (February 1988). Lots of material this month, so let's get started.

My first letter this month comes from Brian (CANA-077). Brian is regularly monitoring the Mississauga Regional Ambulance Service on his scanner. Back in my February 86 column I printed Brian's report on some rather major problems being experienced by Mississauga Ambulance resulting from the installation of a new Computer Aided Dispatch System (CADS). He reports that they still have a few problems, but things have improved. They now have some quality dispatchers, and the computer Modat is up more than it is down. Voice dispatch is still used as a backup.

So far there have been no changes in frequencies. As reported back in February 86, some problems with the repeater towers has meant that the Mississauga units are forced to use 149.605, also used by

Metro Toronto Ambulance. Because the service areas are adjacent, Metro Toronto ALS (Paramedic) units using 149.605 are now forced to use their other channel 143.340. This situation has not changed, but they are learning to live with it. Metro Toronto Ambulance is planning to put 3 additional ALS units into service this year, and they will all go onto the same frequency. Things may get a little congested, but Brian will be keeping an eye on the situation for us.

Brian also reports that the Metro Toronto Police have installed their new Mobile Data Terminals (MDTs) in about half of their Scout cars, and they seem to be performing quite well. The Metro Toronto PD hope to have the rest of the Scout cars equipped by the end of 1987, and all the other cars and boats completed in 1988. Brian does not know the frequency for the MDTs. Hopefully he or another member can supply the information.

From Brian comes this list of frequencies for the Niagara region:

Niagara Regional Police	F1 St Catharines	142.410
	F2 Tactical	142.140
	F3 Grimsby/Lincoln	142.575
	F4 Fort Erie/Niagara Falls	142.545
	F5 Port Colborne/Welland	142.230
	F6 Special	143.055
Ontario Provincial Police (OPP)	Base	42.060
	Mobile	42.220
	Aircraft	42.000
Fire Depts: St Catharines FD, Grimsby FD, Lincoln FD, Niagara-on-the-Lake FD		153.770
Niagara Falls FD, Welland FD, Fort Erie FD, Port Colborne FD, Pelham FD, Thorold FD		153.800
Fort Erie FD		154.400
St Catharines FD		153.830
Grimsby FD		155.910
Ontario Min of Health (Ambulance)	F1 Provincial	150.100
	F2 Regional	155.130
	F3 Spare (seldom used)	149.605
Consumers Gas		451.8125
		452.2875
		452.925
		452.975
Niagara Region Water		151.205

Thanks very much for all the information Brian. I hope you'll be sending us more in the future.

My next letter is from Luke (CANA-110). He sent in a list of radio codes for the Lethbridge City Police:

LETHBRIDGE CITY POLICE RADIO CODES

Operational Codes

10-1	Receiving Poorly	10-11	Back in Service
10-2	Receiving Loud & Clear	10-12	Request CPIC Query
10-3	Standby	10-13	Query Party in Vehicle
10-4	Message Received	10-14	Positive on Query
10-5	Repeat Message	10-15	Negative on Query
10-6	Call by Phone	10-16	Assist Officer - Non Emergency
10-7	Give Location	10-17	Pick-up Officer
10-8	Return to Station	10-18	Ambulance
10-9	Last Complaint Complete	10-19	Request Prisoner Transport
10-10	Booking Out	10-20	Prisoner Arriving at Station

Message Codes

10-30	Industrial Accident	10-37	Dog Complaint		
10-31	Intrusion Alarm	10-38	Domestic Trouble		
10-32	Assault	10-39	Drunk	10-45	Indecent Act
10-33	Attempted Suicide	10-40	Disturbance	10-46	Juveniles
10-34	Bomb Threat	10-41	Drugs	10-47	Landlord-Tenant Disput
10-35	Break and Enter	10-42	Escort	10-48	Lost and Found
10-36	Collapse, Sick	10-43	Fire		
		10-44	Fraud		

10-49	Missing Person
10-50	Mental Case
10-51	Molester
10-52	Neighbor Dispute
10-53.	Noisy Party
10-54	Parking Complaint
10-55	Prowler
10-56	Property Damage
10-57	Purse Snatching
10-58	Robbery
10-59	Shoplifter
10-60	Sudden Death
10-61	Suspicious Person
10-62	Theft
10-63	Threats
10-64	Unknown Complaint
10-65	Be on Lookout For
10-66	Warrant for Person
10-67	Summons for Person

Motor Vehicle Codes

10-80	Abandoned Vehicle
10-81	Careless Driver
10-82	Drunk Driver
10-83	Hit and Run
10-84	Speeder
10-85	Stolen Auto
10-86	Motor Vehicle Accident
10-87	Injury Vehicle Accident

Major Emergency Codes

10-100	Bank Alarm
10-200	Weapon Involved
10-300	Officer Needs Help
10-400	Known Criminal (DANGER)
10-500	Bomb Threat
10-600	Stay Off the Air
10-1000	Call SWAT Team

Thanks very much for the list Luke.

My next contribution comes from Harry (CANA-074). He sent in an article that appeared in the Prince George Citizen, and describes how the radio amateurs in Prince George have used their technical expertise to assist the BC Provincial Emergency Program (PEP) with search and rescue in the area. The Prince George PEP district is responsible for search and rescue for about 60% of the province, and it's the least populated part of the province. Previously, the PEP has been seriously hampered by poor radio communications. Only simplex operation was possible, and the range of handheld portables and some mobiles was limited. If the search operation was any distance at all from Prince George, the PEP had to call in the radio amateurs for communications. The hams were happy to help, but aren't always available because of job demands.

Because the BC PEP doesn't seem to command the money it should to properly conduct operations in remote areas, a low bucks deal was needed. This is where the radio amateurs came to the rescue. Don Fraser, a professional radio technician and radio amateur, built the PEP a repeater unit from old equipment. The repeater was built from an old mobile radio. The required duplexer was an old unit purchased from the RCMP for $100. It was retuned and modified to use the frequencies assigned to the BC PEP. For those not familiar with it, a duplexer is a device that filters out the transmit and receive frequencies, blocking the transmitted signal from entering the receiver. This prevents the receiver from becoming overloaded, and is an essential part of every repeater. (The RCMP recently completed their province wide program to modernize the radio system, changing from 155 MHz frequencies to 139 MHz frequencies. I suspect the duplexer was used for the 155 MHz range.)

The total cost of the unit, including antenna and crystals, was about $500. Fraser has made similiar repeaters for hams before, charging about $400. A commercial unit of similiar quality would cost a couple of thousand dollars. The mobile radio used is DOC approved commercial quality equipment. The modifications are simply allowing the radio to do something that the designer didn't have in mind, but so much reserve was put into the design that the unit does the job well.

In January the repeater was installed on top of Tabor Mountain, in space donated by the BC Forest Service. The repeater is up and working, expanding the range tremendously to about a 160 km radius. The PEP is really pleased, and is converting their mobiles and portables to use the repeater. The following frequencies are used:

BC Prov Emergency Program-Prince George	Repeater	149.495 / 148.655in
	Simplex	148.685
	"	149.525

Harry also passes along some observations he has made on the new radio system shared by Alberta Fish & Wildlife and the Alberta Highway Patrol. (As of this time, the Alberta Highway Patrol has been largely eliminated, with most of the officers now working for the Alberta Dept

of Transportation. It is not known if the former Highway Patrol officers now working for Transportation are using this new radio system. More details are below, immediately after the AGT frequency list). It is not known exactly how many sites have been equipped, but it is expected that the system will eventually cover the entire province. The new system operates on the following:

ALBERTA FISH & WILDLIFE/HIGHWAY PATROL

Repeaters	411.0625 / 416.0625in
	411.2125 / 416.2125in
	411.3625 / 416.3625in
	411.5125 / 416.5125in
	411.6375 / 416.6375in
	411.6625 / 416.6625in
	411.7375 / 416.7375in
	411.8125 / 416.8125in
	411.8375 / 416.8375in
	411.8875 / 416.8875in
Simplex	416.775
	416.9375
	416.9625
	416.9875

Harry reports that the repeaters are interconnected to the telephone network through a phone patch. A mobile unit on the repeater uses the touch tone pad in his unit to dial the telephone number for the control centre, or whoever it is that he or she wishes to talk to. Each repeater is also accessed through the telephone network. Anyone wishing to call someone on the repeater simply picks up a phone (any phone, anywhere) and dials the telephone number for the repeater (long distance toll charges do apply of course). The caller hears a beep, and then he/she is on the air. The caller verbally calls the unit. Also, a mobile unit on the repeater can call a unit on another repeater channel by simply dialling the telephone number for the desired repeater. After the beep, the two repeaters are connected.

This network configuration is easy and inexpensive to implement. Since the telephone company's facilities are being used to link the repeater to other repeaters, the control centre, and other users via the public telephone network, considerable cost savings are realized. The only costs are the costs of the radio, antennas, and other site equipment. It seems that Fish & Wildlife/Highway Patrol are sharing Alberta Government Telephones (AGT) radio sites across the province, further reducing costs. Since the AGT mobile radio network also operates on the 411 MHz band (see list below), it is quite likely that the antennas are being shared as well.

The telephone interconnected network seems to be becoming the most popular method for configuring large radio networks. In addition to the Alberta Fish & Wildlife/Highway Patrol system, the AGT system is also interconnected in this manner. In Saskatchewan, the radio systems for SaskTel, Sask Power, and Sask Highways all use this method. All three systems share SaskTel radio sites. I've even used the SaskTel system myself from my desk at work (I had to get a hold of one of our Radio Route guys who was on the road).

Also, in northern Saskatchewan the RCMP recently added several radio repeaters to enhance coverage up there in the less populated areas. As reported in the November 85 Canada column, a similiar system is being used to connect the new repeaters through the telephone network to the Prince Albert RCMP Control Centre. SaskTel radio sites and towers were used. A similiar arrangement is in place for the RCMP in some areas of Manitoba.

AGT uses the following frequencies for their province wide mobile radio system:

ALBERTA GOVERNMENT TELEPHONES MOBILE RADIO SYSTEM

Repeaters	411.0125 / 416.0125in
	411.0375 / 416.0375in
	411.1625 / 416.1625in
	411.1875 / 416.1875in

	411.3125 / 416.3125in
	411.3375 / 416.3375in
	411.4625 / 416.4625in
	411.5375 / 416.5375in
	411.6125 / 416.6125in
	411.7125 / 416.7125in
	411.7625 / 416.7625in
	411.9125 / 416.9125in
Simplex	411.9375
	411.9625
	411.9875

As I mentioned above, the Alberta Highway Patrol was basically eliminated last March 31. It was the victim of tough times and budget cuts. Formerly the Alberta HP enforced the Highway Traffic Act in conjunction with the RCMP. Now the HP has been disbanded, with the officers now working for Alberta Transportation. The officers now solely work the weigh scales, and check trucks for weight, safety, and other infractions. They will no longer enforce any other traffic laws such as speed limits (the officers won't even have ticket books). The police-like uniforms will be replaced by government issue blazers and slacks, windbreakers and coveralls.

Many of the HP officers are rather bitter. There were about 100 of them, with about 68 people transferring to Transportation, and the other 30 or so changed to other positions with the Solicitor General, took early retirement, or left the civil service. One reason for the bitterness is that the salaries of the officers transferring to Transportation will be frozen for a couple of years because they are ahead of the Transportation workers.

I do not know if the new radio system detailed above is being used by the officers now under Transportation, or if the Transportation Department's own radio system is being used. Because the remnants of the HP may still be using the new radio system, I've written it up as such.

Harry reports that 461.875 is used in Edmonton by a fire department on "Refinery Row." Harry has not been able to positively identify which company it is, but it is definitely a refinery fire department. Thanks very much for all of your material, Harry. I'm sure we're all looking forward to hearing from you again.

That's all for this month. Next month I will have the 1987 Canada Column Index. See you in 1988!

contact info wanted

This column has two purposes: to help members contact each other, and to help member obtain directly from one another information on various subjects related to 2-way communications monitoring. If you would like to meet, converse or correspond with, other members by telephone, letter, or cassette, this column is the place to state your interest. Remember—those who respond will do so directly, so be sure to provide your phone number, the best time to be called, and/or your address. Write to:

Scott Mattson, 2820 Bridge Ave, Point Pleasant, NJ 08742

Requests for copyrighted material or information considered 'sensitive' by RCMA will not be printed in this column.

CONTACT WANTED: Thanks to Vincent Purn (NJ-177) for MNCRR info. Would like to correspond, but could not find your address in back issues. If interested contact:
CARL GEROSA (NY-117) 9 Knollwood Drive, Larchmont, NY 10538-1236

INFO WANTED: Does anyone know the frequency that the aerial lift bridge in Duluth uses to talk to ships for lifting the bridge in the Duluth Harbor?
ROGER WEST (MN-052) P.O. Box 366, Wyoming, MN 55092

CONTACT WANTED: I want to contact members in the province of Quebec and in the state of Vermont, USA, to exchange frequencies.
GILLES THIBODEAU (CANA-101) 3653 Montcalm, Lac-Megantic, Quebec, Canada G6B 2H8 (819) 583-1817

INFO WANTED: New to Charlotte, NC area. Would like frequencies on any state, city, county, or local government.
JEFF KLOPFER (NC-080) 1509 Sharon Dr., Waxhaw, NC 28173 (704) 843-5017

CONTACT WANTED: I would like to correspond with anyone living in the Atlanta Metro area who would be interested in exchanging frequency info, codes & signals, listening tips, and various other monitoring info. Also, those interested in possibly forming a club for the Metro area, please reply! Any info on club formation would be appreciated. I am personally interested in Federal, Public Safety, and News Media communications. Are you? If so, I wnat to talk to you.
BLAINE BROOKS (GA-079) 1009-U Oakchase Dr., Tucker, GA 30084 (404) 621- 0155 after 7 PM

INFO WANTED: Link frequency in the 72 Mhz and 73 Mhz band for the California Highway Patrol covering the whole state of California.
JOHNNY D. DORSEY (CA/LA-443) 955 Inland Cen., Dr. #16, San Bernadino, CA 92408

INFO WANTED: I would appreciate any and all frequencies for the north suburban area of Chicago, Illinois.
JOE SCHULTZ (IL-357) 921 Wilmot Rd., Deerfield, IL 60015 (312) 945-4668

INFO WANTED: I would like to correspond with and exchange info on the Miami PD 800 system or with someone that monitors a PD 800 trunk system.
EARL MORRIS (MO-021) 5007 Columbia, St. Louis, MO 63139

Welcome to another exciting edition of *Digital Communications and Computer Corner*. Not much happening in the mail this month. Actually, a few members did write requesting copies of the frequency management database. For those of you who might of missed that month's column, I have a frequency management database program for organizing (storing, sorting, etc) all those frequencies that you have scribbled down everywhere. The program is for the IBM's and compatibles. If you would like a copy, send me a formatted blank disk with return postage and I will run you off a copy of the program. It is not copyrighted (at least I couldn't find anything stating such) and works fairly well.

Some new information is coming in about the use of mobile video terminals in police cars. This sounds extremely interesting to me (of course I think mowing the grass is exciting). From the sounds of it (no pun intended) the system operates in the 800 Mhz range. Not quite certain what mode or protocol is used. Hopefully we can expand on this later on. Last month we introduced you to Packet Radio. I have a complete in depth description of it, but after looking through it, it seems a little too technical (binary math, etc) so I won't waste space with it. This month presents an article describing a new proposed system of tying computers and radio in together. Sounds interesting so I thought I would pass it along to you.

WIRELESS MODEMS: THE NEXT CORDLESS TELEPHONE? by Jack Decker

I'd like you to think, for a moment, about the cordless telephone. For nearly a hundred years, if you wanted to use a telephone, your freedom of movement was restricted to the length of the cord attached to the receiver. Then

someone got the idea to remove the cord and use a short-range radio transmitter-receiver in the handset instead, and the cordless telephone was born. Early units were very primitive by today's standards - they generally had no way to dial (you had to return to the base unit to do that), their range was limited to about 100 feet, and the sound quality was reminiscent of tin cans and string. In spite of all that, the idea of cutting the cord caught on with the public, and the cordless telephone is now a multimillion dollar industry.

What is particularly worth noting, however, is that the cordless telephone is a "Part 15" device. This means that it operates under "Part 15" of the Federal Communications Commission rules and regulations, which specifically pertain to the operation of low-power transmitters for which no license is required. Keep in mind that originally there were no frequencies specifically allocated for cordless telephones, so the designers of the first cordless units had to find a suitable band on which low power, unlicensed operation was permitted. Originally, frequencies just above the AM broadcast band and frequencies in the 46-49 MHz band were used, but the AM frequencies were later dropped in favor of 46-49 MHz use only. The 46-49 MHz band was not originally set aside for cordless telephones, but low power operation was authorized in that band for the use of things like children's walkie-talkies and remote control models.

However, as the cordless telephone became more and more popular, and there were more and more reports of interference between units, the F.C.C. realized that something needed to be done to bring order out of the chaos. So, they then set standards for cordless telephone operation, assigning cordless phones to certain frequencies and specifying permissible transmitter power levels. Part of the F.C.C. action was to allocate new frequencies for cordless phones in the 46-49 MHz range, while eliminating the use of the low-fidelity AM frequencies that were responsible for the poor audio quality of early cordless phones.

When you stop and think about it, the cordless telephone would hardly fall into the category of a "necessity of life" for most people, but nevertheless they have made a big impact on the consumer market. Ten years ago, if you had asked people to name a needed product that had not yet been invented, I doubt that anyone would have said "I need a phone handset with no connecting cord." But, as is the case with so many consumer products, the availability of the product created the demand. People saw the product, realized that it could be of use to them, and bought - in big numbers!

CAN HISTORY REPEAT ITSELF?

Computer hobbyists are in a similar situation right now. Many computer users have discovered the pleasures and benefits of connecting their computer to other computers via telephone lines, using modems. However, the dependence on phone lines creates some problems for the average user. For one thing, the family's telephone line is tied up while the computer is online, and for another, toll charges or measured service telephone charges may be imposed even though the computer being called is only a relatively short distance away. Also, since only two users at a time can be connected via a telephone connection, it is impossible to have local area "computer conferences" involving more than two users (unless there is a sophisticated, multi-user BBS in the area, to which all the potential participants have access).

One obvious solution to these problems is packet radio, as widely used by amateur ("ham") radio operators. But, there are a couple of restrictions to the use of ham radio. The first is that all potential users of amateur radio must first learn the antiquated Morse Code, plus some electronic theory. While these requirements may not be burdensome for some computer hobbyists, others (who have little interest in electronics or no desire to learn the Morse Code) may see them as formidable obstacles. The other restriction is that no messages of a commercial nature may be sent via amateur radio. Since most BBS's contain advertising of one form or another (if only messages offering no-longer-needed computer equipment for sale or trade), the use of amateur radio might tend to limit the free exchange of messages that could remotely be considered "commercial".

Besides, amateur radio operators and computers hobbyists may have totally different interests. While there are many people who are interested in both amateur radio and computers, there are also many people who are interested in one hobby but not the other. Amateur radio operators, who have suffered a decline in the number of people joining their fraternity in recent years, have sometimes looked at computer users as a source of potential "new blood" for their organizations. However, I believe it is a disservice to both the amateur radio community and to the computer user community to induce computer hobbyists who have no actual interest in amateur radio into becoming "hams". The computer hobbyists will have little interest in the majority of the activities enjoyed by amateurs (such as building radio transmitters and antennas, or talking to people on the other side of the world via Morse Code) while many of the amateurs may not be interested in discussions of bits and bytes, which DOS is best, or the differences between Basic, Pascal and C. While the ability to use packet radio may induce a number of computer hobbyists to join the ranks of the amateur radio operators, I believe this would be a "marriage of convenience" and not really satisfying to either group in the long run.

A short analogy might be in order. Suppose we have a stamp collectors' club that, as a benefit to its members, offers a free trip to a philately convention in some major city of the world every year. Now, lets further suppose that club membership is declining, so some of the members, in an effort to boost membership, start selling the club as a good way to travel to various places at low cost. A number of people who like to travel might thus be attracted, and while a few of those might actually become interested in stamp collecting as a byproduct, most are going to become very bored and irritated with club meetings where the only discussion is about First Day Covers and commemoratives. By the same token, if these new members vote to change the format of the meetings so that travelogue films are shown during the meetings, the original members would quite rightly protest that the purpose of the club is being abandoned. Ultimately, neither group would be fully satisfied. And I suspect the same

will be true when computer hobbyists, many of whom have no desire to ever pick up a soldering iron, become amateur radio hobbyists simply to gain the benefit of being able to operate packet radio stations.

So, what is really needed is a way for computer users to be able to enjoy the benefits of packet radio operation, without the need to become amateur radio operators. Mr. Donald L. Stoner of Mercer Island, Washington proposed this very thing before the F.C.C., with a proposal to establish a computer hobbyist radio service, to be known as the "Public Digital Radio Service" (PDRS). This service would have operated on the 52-54 MHz band. However, the proposal was opposed by the American Radio Relay League (a national amateur radio organization) and a few other organizations and individuals, and the F.C.C. denied it (but said that they might consider allowing a similar service on a different frequency).

Obviously, the formal implementation of this service is not a high priority for the F.C.C. But, under current F.C.C. regulations, it would be quite feasible to start a "bargain basement" version of PDRS and, once the need and desire for such a service is established, I believe that the F.C.C. might then reconsider the PDRS proposal with a bit more urgency.

PDRS NOW?

You may be asking yourself, "Is it really true? Is there a way for computers to communicate with each other via packet radio, without the need to obtain a license, and with no restrictions on message content (other than, perhaps, the general restrictions on the use of obscenity and profanity on the airwaves)?" It sure is, but the only problem is that nobody's making the equipment yet, probably because nobody has given much thought to the particular frequency band involved.

"But if the F.C.C. hasn't authorized packet radio for non-amateurs, how can I use it?" Easy. Under the provisions of good old Part 15, the same section of the F.C.C. rules that the cordless telephone manufacturers used to get their product started. "But cordless telephones only have a range of about 1000 feet. What good will that do me?"

Well, we can stay within the scope of Part 15 regulations and still get a MUCH greater range than 1000 feet. You see, there is one major difference between a wireless modem and a cordless telephone handset. The cordless phone is intended to be portable, so ideally we want to be able to use the shortest possible antenna on it. It wouldn't be very practical to have a cordless handset with, for example, a ten foot antenna on it. The higher the transmit frequency used, the shorter the antenna you can get by with, and at the 46-49 MHz range the short antenna used with most cordless phones is adequate. But, at 46-49 Mhz, F.C.C. (Part 15) regulations only permit a transmitter output power of 1/10 watt, which severely limits the distance at which the handset and base can be separated before the signal fades out.

But a modem generally remains in one place, and for that reason we can easily connect it to a larger, outdoor antenna if necessary. In the case of amateur packet radio stations, outside antennas are often used to increase range (even though they are not strictly necessary at the frequencies used by amateur radio operators). With no practical limitation on antenna length, we can use frequencies that might be unsuitable for portable operation. And, as it turns out, there is a small band of frequencies that can provide us with a much greater range under Part 15 rules and regulations, if we are willing to erect a good antenna.

That frequency band is the 160-190 KHz band (sometimes known at the "1750 Meter band"), located well below the AM broadcast band. As I understand it, at these low frequencies you can use up to one watt of power and an antenna length of up to fifty feet, and still remain within F.C.C. regulations for unlicensed operation. Theoretically, a range of up to 30 miles is possible, although you may practically not be able to communicate that far. But please keep in mind that packet radio stations can act as repeaters (while still permitting normal local use of the packet station), so, for example, to send messages or data to someone as far as 100 miles away might be possible if there are enough conveniently-spaced repeater stations with good antennas in between.

Low frequency equipment is very inexpensive to build and operate, but the antenna is very important. The best antenna would be a fifty foot vertical mast with lots of radials (ground plane wires) buried in the ground, but this is obviously impractical for most users (although, if this mode of operation ever catches on, it's quite possible that one or two companies may specialize in manufacturing "easy to install" low frequency antennas!). However, if you are willing to accept a reduction in range, shorter antennas can be used. Even a relatively small loop antenna may get you a five mile range (and, again, don't forget that repeaters can be used for greater distance).

Transmission on the 1750 Meter band can be by AM, FM, SSB or any other mode you like, but it has been suggested to me (by Bill de Carle) that the optimum mode at 300 baud might be MSK (minimum-shift-key). Bill states that "at these low frequencies you can do everything digitally, even when it comes to directly synthesizing the RF waveforms." Another correspondent (Jay Coote) has suggested that it may be possible to use a High-Frequency amateur type packet (AMTOR) in the low frequency band. Some others are using BPSK [bi- phase shift keying], which for all I know, may be the same thing as MSK.
I am convinced that if some individual or company would take the time to design and build a low-frequency Part 15 wireless packet radio unit (which could be a low-frequency transceiver intended to be connected to any of the commercially-available amateur packet radio Terminal Node Controllers), it could well be the turning point in getting PDRS "off the ground." Computer hobbyists would begin to see the desirability of having this kind of equipment, would most likely pressure the F.C.C. for better frequencies, and the industry would take off. And, of course, the first company to produce such a unit would likely wind up being a major player in this industry (how would you like to be the next Hayes or Microsoft?).

You may ask why, if I think this is such a great idea, I don't keep it to myself and build a prototype unit. The answer is very simple: I'm not a hardware hacker! I don't have the technical knowledge required to make such a unit, and don't personally know anyone who has the expertise or initiative to produce such a unit. Also, I do not have the financial resources to participate in this endeavor, being one of the underemployed at present. So, although I would love to get a piece of the action on this industry, there really is no way for me to actively participate. And keeping the idea to myself would accomplish nothing, since then the units would never be built and no one would benefit. I only hope that, if anyone gets filthy rich in this industry, they will remember me and, if nothing else, at least send me a couple of free samples of each new model of wireless modem that they create.

Personally, I could put a pair of wireless modems to good use. The SYSOP of an area BBS lives approximately five miles away from me, but it is a toll charge for me to call his BBS. Conversely, people in my phone exchange have access to cheap long distance (good for calling other BBS's) while people in his exchange do not. So, we could both make use of a radio link to connect our two sites. At present, the only workable solution we can find are the wireless modems manufactured by a company called Electronic Systems Technology (1031 N. Kellogg Street, Kennewick, Washington 99336). They manufacture a device called the "ESTeem Wireless Modem" that transmits on 24 channels in the frequency range of 72.040 to 72.960 MHz. It is licensed using "F.C.C. form 574" (under "Part 90" of the F.C.C. regulations, I believe), and appears to be intended for business applications only. Therefore, it probably would not be possible to license this unit for what would basically be considered "hobbyist" use, and the units are certainly not priced with the hobbyist in mind - each wireless modem costs over $1,000! I can't imagine why the cost is so high when an amateur Terminal Node Controller/Transceiver combination can be purchased for under $400, but we can't afford one, let alone the two we'd need to establish communications between us.

In conclusion, I am firmly convinced that if computer hobbyists understood the benefits of PDRS, they would be solidly behind efforts to get a decent frequency allocation for this service. However, until they have actually had the opportunity to sample such a service and see what it can do for them, they will remain apathetic toward it, and will not put any pressure upon the F.C.C. to formally recognize this type to service. By providing low-cost equipment to operate this service on 160-190 KHz, computer hobbyists would be able to utilize the service now (instead of waiting for the F.C.C. to act, which may take years) and would have practical knowledge of the benefits of this type of service and more incentive to lobby the F.C.C. for a better frequency allocation.

I would suggest that any individuals or groups that attempt to create a working low-frequency packet radio standard try to keep in touch with each other, so that incompatible standards don't develop between different groups. A public SIG is available on the BIXNET BBS at (616) 361-7500 (300/1200/2400 8-N-1) to discuss the topic of Wireless Modems and The Public Digital Radio Service, and I would suggest that this would be a good place for people who are interested in this subject to exchange information and keep in contact with others who have similar interests.

One final technical suggestion: Although this may exceed the scope of the basic system described above, if you do decide to design a low-frequency packet radio system "from scratch" and you give it any amount of intelligence, please give it the capability to require a fairly complex (say 10 or 14 character) password for access (and even possibly the ability to be able to vary passwords according to time of day, or to use passwords from a pre- created list) and/or the ability to accept incoming calls from only one other packet system; and also give it the ability to be connected "back to back" with a conventional smart modem (in addition to the "standard" connection to a computer). Why? Because then a low-frequency packet radio system and conventional modem could be placed at a friend's or neighbor's home, or at an office location, and used to gain access to the telephone line there without necessarily giving everyone else with a similar system the same access. The big advantage of doing this would be when the remote conventional modem is connected to a different telephone exchange (with a different local calling area) than yours, and making a connection through the remote packet system/conventional modem combination saves you outgoing toll charges. In this type of situation, it would be ideal if the packet system could contain enough intelligence to reject unauthorized usage and/or to reject the sending of outdialing commands to the conventional modem that would place a long distance call (i.e. "ATD" commands where the first digit is a "1", or the second digit is a "1" or "0").

RESOURCES:The following is a list of various resources on the subject of low- frequency radio, including a few people who seem to be knowledgeable on the subject. If I have omitted anyone from this list, I apologize.

The Longwave Club of America, 45 Wildflower Road, Levittown, Pennsylvania 19057. Has a publication called the "LOWDOWN" which apparently is widely circulated among low-frequency enthusiasts (although I have yet to see a copy!).

Radio Computing Digest, c/o Paul Louden Christensen, P.O. Box 916, Oroville, Washington 98844-0916, telephone (509) 476-2600. Send $3.00 to receive issue number one, the only issue published so far. It has a wealth of information on radio computing, including a much more complete list of resources than what is being provided here.

Panaxis Products, P.O. Box 130, Paradise, California 95969, telephone (916) 534-0417. These folks produced an 1750 Meter FM transmitter-receiver kit a couple of years ago but recently stated they only have three (3) printed circuit board sets left. A plans and circuit board set goes for $28.50 while a complete kit is $134.95 (antenna not included). Panaxis also sells other types of kits and equipment, including transmitters for (unlicensed) low-power AM and FM (including stereo FM) broadcasting.

Dave Riley (Broadcast Technical Services), 11 Walnut Street Marshfield, Massachusetts 02050, telephone (617) 837-3521. Radio Computing Digest states that Dave has lots of experience in RF communications and Radio Computing and has published a small book on the subject ($10). He also operates a BBS at (617) 837-2880. Kevin B. Haywood, another correspondent, states that Mr. Riley's booklet is called "Computer Communications Study" and contains information on F.C.C. rules governing no-license broadcasting, addresses of radio manufacturers, and hints and ideas on how to convert ham radio gear to the license-free bands.

Donald L. Stoner, 6014 East Mercer Way, Mercer Island, Washington 98040. Original author of the Public Digital Radio Service proposal, now said to be working on a revised proposal. His time is quite limited but he may appreciate hearing any PDRS suggestions you may have, even if he is unable to respond.

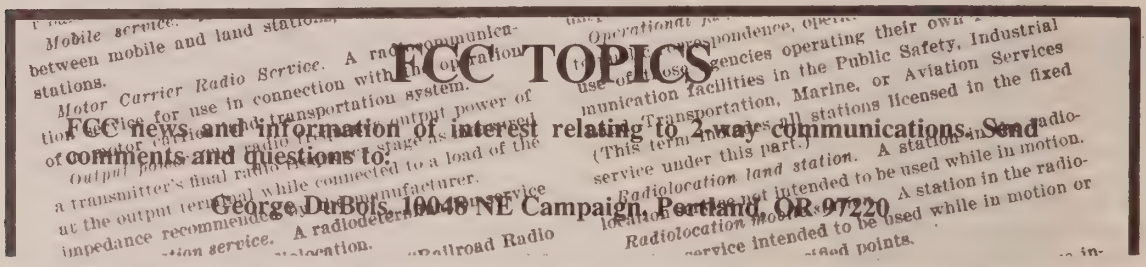
Bill de Carle, 235 Baythorn Drive # 301, Thornhill, Ontario, Canada L3T 3V6. Bill has done some work with low frequencies, including running "some experiments with a low-frequency beacon transmitter sending FSK data on 180.2 KHz" in one direction from his apartment to his office, a distance of about five miles. He states that his transmissions "can be copied reliably at this distance even with inefficient antennas, but I use computerized signal processing to enhance data recovery."

Mel Carter, 46 14th Street, Wheatland, New York 82201. Bill de Carle states that Mr. Carter "has designed a simple BPSK [bi-phase shift keying] transmitter/receiver using only CMOS chips."

Jay Coote, 808 North Avenue 66, Los Angeles, California 90042. Another low- frequency beacon operator who may be able to offer information on the peculiarities of LF operation.

Jack Decker, 1804 West 18th Street # 155, Sault Ste. Marie, Michigan 49783- 1268, telephone (906) 632-3248. I will be more than happy to field-test any prototypes of low-frequency radio modems or packet radio systems. As a computer user who has had some experience in telecommunicating with conventional modems but virtually no experience with packet radio, I can easily discover any difficulties that the average computer user might have with your product, and would be more than willing to offer suggestions for product improvement!

This File is provided as a Public Service by: Business Information Xchange NETwork BIXNET - 300/1200/2400 8-N-1 616-361-7500 24 Hours 7 Days a week Thom Byxbe, SysOp David Stockdale, Co-SysOp Jack Decker, Co-SysOp, Administrator of PDRS & Wireless Modem SIG. BIXNET is a public BBS operated by: Advanced Business Technologies, Incorporated 4191 Plainfield Avenue Suite # 217 Grand Rapids, Michigan 49505 VOICE 616-361-0200


FCC TOPICS
FCC news and information of interest relating to 2-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

The FCC has issued a Memorandum Opinion and Order denying a petition by the Washington Legal Foundation that would have required warning labels on cellular mobile telephones. The labels would have warned users that privacy can not be assured when using such phones. The Washington Legal Foundation is a public interest law group with 80,000 members (many of whom use cellular telephones). They had asserted that cellular telephones are indeed susceptible to interception, that the Electronic Communications Privacy Act will do nothing to change this fact, that much confusion (and false information) exists and that a false sense of security exists among users. A warning label would remedy this. (As they noted, cordless telephones are susceptible to interception and labels are required on them.) The cellular providers opposed the petition, stating that the ECPA and scrambling methods will solve the problem and that the labels would only discourage potential customers. The Commission denied the petition, noting that the WLF filed the petition before the ECPA went into effect. They feel it would be premature to require labels without waiting to see how effective the Act is in solving any problem. (Hell, I can answer that!) Also, as scrambling methods become available, those feeling the need for additional security may avail themselves of it. They also encouraged cellular providers to inform their customers of the possibility (or probability) of interception.

The Commission has amended its rules to eliminate the requirement for uniform nationwide rates for the 454 mHz Air-to-Ground mobile telephone service. The uniform rates were considered essential to facilitate deployment of the service when it first started in the early 70's. Since the service has been around for over 15 years, and with the divestiture of the Bell system, the Commission has decided the rule has outlived its usefulness. Since it costs some carriers more to provide the service in some areas, there is no reason they shouldn't be able to charge more. (And of course, for carriers in other areas to charge less.)

The FCC has published a Notice of Proposed Rulemaking that would rewrite Part 87 of the Rules and Regulations. Part 87 governs the aviation services. As well as simplifying or streamlining many sections (resulting in a 30% reduction in size), the change would also incorporate a number of minor amendments. The first would expand the

availability of Aeronautical Advisory (Unicom) channels and increase the number of frequencies available. Unicom stations provide non- Air Traffic Control type services, such as weather conditions, fuel availability, advisories, etc. In addition, at airfields without a tower, pilots announce their position and intentions on the Unicom frequency (sort of Air Traffic self-Control). At these fields, only one Unicom station is permitted, in the interest of safety. Two or three years ago, the FCC amended the Rules to permit more than one Unicom station at airports with a control tower, since the tower provides all ATC functions. The Commission is now proposing to allow more than one Unicom station at fields with an FAA Flight Service Station, since their frequency serves as the ATC advisory frequency. To increase the number of frequencies available for Unicom service, the Commmission is proposing to put all Unicom frequencies (including those now available only for heliports) into a common pool and will begin assigning all of them based on geographic separation only (meaning an increase in the use of 25 kHz-spaced channels, since most aircraft are equipped with 720 channel radios these days anyway). This also means that some existing stations may be reassigned new frequencies. Another change would expand the use of the frequencies 122.775 and 122.85. They are presently available for communications between aircraft service organizations and aircraft on the ground. The change would allow use by aircraft in the air, as well as on the ground, relieving congestion on the Unicom frequencies. And, mobile stations on the Aeronautical Utility (ground) frequencies (121.6 - 121.925) would be able to communicate with aircraft (concerning aircraft servicing, taxiing assistance, and so on). The rest of the changes are mainly administrative. All the frequencies available to aircraft stations, from VLF through HF through 33 gHz radar bands (including those shared with other services, such as marine), would be put in one table, with a reference to the applicable rule Subpart governing their use. All the power and other technical requirements will also be put in table form, instead of being scattered throughout Part 87. And finally, the term "airdrome" will be replaced with the more popular term "airport", although I always liked airdrome myself.

The FCC has issued a Notice of Inquiry into the expansion of the use of trunking in the land mobile services. In the 851 to 866 mHz band, this would include allowing trunked use of the channels presently reserved for conventional repeater use (851.0125 through 854.7375). Trunking is presently used exclusively in the 856 - 866 mHz band. Trunked channels are selected and assigned by the Commission, who keep track of assignments by computer. Assignments are made on an exclusive basis and a strict 70 mile separation (110 miles in some areas) is maintained between systems on the same channel. For this reason, expansion of trunking at 800 mHz would be relatively easy, although consideration would have to be given to existing conventional systems, as well as to licensing procedures. For the same reasons, if might also be possible to permit trunking in the cities that have channels available in the 470 - 512 mHz T-band. Channels in this band may be assigned to a licensee exclusively if he has a sufficient number of units. Shared channels could also be trunked, possibly unused channels or channels with repeaters owned by the same licensee(s). One problem would be that T-band channels are divided into numerous "pools" by service, and whether trunking should be allowed between pools. Below 470 mHz, though, it's a different story and the Commission has been reluctant to consider trunked operation in the VHF and UHF bands. Channels are shared with numerous existing licensees with numerous transmitters on each frequency, located over a widespread area. Trunking on these frequencies would be impractical, but comment is sought on whether such use should be permitted where a number of licensees cooperate to construct a system or where a single licensee has a number of channels that could be trunked.

FEDERAL GOVERNMENT and MILITARY

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:

Dennis Biagioli, 607 W. Pleasant Ave, Villa Park, IL 60181

Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine Editor.

Hi! I hope after a couple of months of Illinois data you're ready for a little something from someplace else.

Before we get into the frequencies, I'd like to point out an organization that I belong to that I feel is worth many times the cost of annual dues. You won't find frequency information in the monthly "Air Force Magazine", but if you want highly detailed and current information on all facets dealing with the equipment and personnel of the U.S. Air Force, this is exactly what the doctor ordered. Special issues appear through the year dealing with specifics. Perhaps the issue dealing with everything you want to know about "Soviet Air Power". My favorite is the "Almanac" issue which details facts and figures about planes, units, missions, personnel statistics, location of National Guard and Reserve units and their assigned aircraft.

RCMA member Bob Trivalos (WI-026) has offered to handle any requests for further information and/or membership details. You can write him directly at 906 E. Waterford Ave., Apartment #3, Milwaukee, WI, 53207. Please include a SASE with your request. He can arrange a sample copy of the magazine for only the cost of postage.

Certainly you might have noticed that occasionally this column contains requests for specific information. In case you've always thought those requests were never filled, read on...

BRIAN (ENG-002) sent a reply to a request in the June issue for information regarding Benwaters Air Force Base, England.

Tower	257.8
Ground	341.4
Base Ops	246.0
ACP	347.45
Metro	379.0

Even though most of us cannot monitor those, I included it just to encourage you to answer a request if you can. Those asking really appreciate it.

BILL (MD-005) made a trip to Scott Air Force Base, Illinois, to view a CFR and medical/aircraft evacuation demonstration as part of the 35th Annual Convention of The International Fire Buff Associates. He reports the following activity:

138.175	mike being keyed, but not definite usage heard
148.525	Telephone
149.475	Telephone
163.4625	paging
164.9875	"radio test" only traffic heard
165.1125	aircraft maintenance traffic also medical personnel on demonstration aircraft
165.3125	traffic heard, but not ID-ed
173.4375	ID-ed as "Scott AFB Operator" and phone patch
173.5375	traffic heard, but not ID-ed
173.5625	was CFR freq. used to move apparatus around for demonstration

A very good friend (but not member of RCMA) is being generous with his findings again! DAVID JONES offers the following "confirmed" finds from Loring AFB, Maine. LAFB is a SAC host base with B-52, KC-135, F-15 and F-16 plus other support aircraft.

LORING AIR FORCE BASE

138.175 OSI, administrative
138.325 Paging
148.075 Commander's Net (mobile input)
148.175 "Heather" and "Radar" (maint.) units and others B/M's
148.245 "Eagle" maint. units and "Base Wine" comms
149.250 Tower to flite line crews (especially maintenance)
Note: tower must be able to communicate with any unit possibly going out on runways
149.525 output for 148.075
163.3750 SAC security
"Whiskey" units perimeter and sector security
Control units are gate or check points
163.4875 Security Police
"Alpha" units -- flight line
"Control" are gate or check points
"Yankee" are sector/perimeter units
163.5375 Motor pool, aircraft maint. and services
163.5625 Base Police (law enforcement & speed traps)
164.1000 Security Police (secondary)
165.0125 "Job Control", aircraft electrical maintenance
165.0375 Field Maintenance ("FM" units)
also "Red" and "Green" units, aircraft
165.1125 Aircraft refueling (Base = "Control")
165.1375 Aircraft maintenance and services
"Eagle", "Blue", "Gray" and "Gold" units
165.1625 Aircraft maintenance and services
165.1875 Aircraft services
165.3125 Transient Alert ("TA") units
services for aircraft in transit
167.8500 probably Energy Dept.
173.4375 Medical Net and Armory Net
173.5375 Testing only
173.5875 Fire/Crash units
235.10 Air-to-air communications
236.60 Tower and Approach Control (also 120.850)
238.80 Tower to aircraft on the ground
275.80 Aircraft (unconfirmed usage)
294.70 Final tower/approach frequency
311.00 SAC (common) Command Post
319.10 FAA (Houlton, ME)
324.50 Tower/Approach frequency
342.50 ATIS (Terminal Information -- weather)
346.40 Aircraft (unconfirmed usage)
349.00 Final approach/tower frequency
359.30 "Loring Radar Services" air traffic control
363.80 Tower, air traffic control
372.20 Pilot-to-Dispatcher (inbound aircraft can request services)
413.450 Paging ("Command Post" and "Alert Force")

Our deepest thanks to those who made this month fun. If you enjoy this column, please contribute to it. Next month we'll have our year-ending index. In 1988 we'll start the new year off right with good lists from Little Rock, Arkansas, and the Cape Cod National Seashore, Massachusetts. Until then...

73-
Denny

INTERNATIONAL

This column is for reporting 2-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to:

Rickey Stein, 456 Barrymore Place, North Brunswick, NJ 08902

Just a couple of months ago, I published a short list of frequencies active in the Angus area of Scotland. I have just received a list updating and correcting some of those listings. As I have mentioned a number of times in this column, there are a great number of changes occuring in the band plan and assignments within all of the UK. I have been exchanging information with an active group of UK monitors and I receive information almost weekly from them or from my other contacts in the UK. I am presently redoing our UK frequency file, putting all of the information on a newer, larger and faster machine with much more capability than I presently have. This is going to take a bit of time. While I'm doing this, I would really appreciate receiving any additional information that you, the membership, might have in order for us to make this listing as complete as possible. Any additional information will also give me material to exchange with the UK group so that I can continue to receive their updates and additions. Now to the Scottish info:

141.1250	Dundee	Radio Tay Talkback channel
144.7050	Dundee area	Raynet exercises
144.8000	Dundee area	Raynet exercises
147.7250	Aberdeen area	Serious crime/drug squad
147.7250	delete Angus Police see 154.965 below	
147.9000	Angus	Fire Brigade hand helds
147.9750	Dundee area	Serious crime/drug squad
154.9650	Angus area	new VHF mobiles simplex
155.0250	Dundee area	new VHF mobiles simplex
155.1500	Perth	new VHF mobiles simplex
158.4250	delete Dowel Slumberger Private Marine Channel to 467.5750	
165.3850	Angus	farm workers
165.3850	Kincardineshire	farm workers
167.3350	delete Kens Taxis-no longer in operation	
172.1350	delete Kens Taxis-no longer is operation	
462.4750	Montrose	dock workers
466.4500	Dundee West and City Center	UHF hand helds [base]
466.5000	Forfar	UHF hand helds
466.5500	Dundee CH-3	UHF hand helds [base] used for talkthru at football matches, etc.
466.6000	Brechin	UHF hand helds
466.6000	Dundee East	UHF hand helds [base]
466.6000	Kirriemuir	UHF hand helds
466.6000	Montrose	UHF hand helds
467.5750	Dowel Slumberger	on board communications from 158.4250
473.8500	Dundee West and City Centre	UHF hand helds [mobiles]
473.9500	Dundee CH-3	UHF hand helds [mobiles] used for talkthru at football matches, etc.
474.0000	Dundee East	UHF hand helds [mobiles]

****

RCMA Old Timer Ernest Kemeny spent some time in Israel and in Egypt and naturally, he brought his radio along with him. I have previously listed his Egyptian loggings. Here are some of the air frequencies fond in Israel and on the trip via Air Sinai from Israel to Egypt.

118.3000	Ben Gurion Airport	Tower
118.5000	Ben Gurion Airport	Unknown use
120.5000	Ben Gurion Airport	Approach/Departure
121.8000	Ben Gurion Airport	Ground control
122.2000	Ben Gurion Airport	Unknown use
124.3000	Ben Gurion Airport	Departure control
126.6000	Eilat area	Unknown use
126.8000	Ben Gurion Airport	ATIS
127.3000	ARTCC? Nicosia a/o	Tel Aviv Centre
129.3000	Eilat area	Unknown use
129.4000	ARTCC? High Altitude?-	Jeddah Centre?

****

We have a friend who is a monitor near Tel Aviv. At this time, he is using only tunable radios- a Portavision-55 [a Realistic product to receive TV audio] and a Patrolman-60. He reports the following information-but with only approximate frequencies. He hopes to have a programmable unit in the near future and will then be able to provide us all with some positive frequency data.

38-42	voice in Hebrew, obscure sentences with codes, one side of conversation, a military station which controls traffic on the sea-fishing boats along Mediterranean shore off Israel
42-46	occasional weak signals,private radio telephone
near 166	Magen David Adom emergency station ambulances
185.75-191.75	paging service + Israel TV audio
191.75-197.75	paging service + Israel TV audio
215.75	Egyptian TV audio Channel 10 El Arish?
near 450	public transportation company in Tel Aviv region
near 460	Metrophone- a service connecting vehicles to station by radiotelephone
485.75	'Channel Two'-Israel Channel 22?-experimental
517.75	Israeli TV audio-probably Channel 24 Acco
533.75	Channel 28 Tel Aviv [from Shalom Tower]
865.75-871.75	2-way service/mobile to base/factory,plants,taxis, private security services
871.75-877.75	'Pele-phone'-one of the Cellular mobile services available in Israel.

****

And finally, again from Ernest Kemeny from a trip through Holland in May of 1984, the following frequencies from Amsterdam:

86.300	Digital pulses with broken voice	158.630	taxicabs
86.700	Amsterdam PD	158.710	taxicabs
148.470	voice	159.010	taxicabs
150.665	voice	159.050	voice
153.210	mobile phone	159.610	voice
153.310	mobile phone	160.170	taxicabs
153.350	mobile phone	160.470	voice
153.470	mobile phone	164.150	voice
153.610	mobile phone	164.390	voice
153.650	mobile phone	164.710	voice
153.670	mobile phone	165.230	paging data
157.150	voice	464.075	data

****

Finally, I have a correspondent who is using a Panasonic RF-5000A and needs the owner's booklet for that radio. If anyone out there has one, and is willing to loan it to me to copy or will copy it and send along the sheets, I'll pay for the copies and the postage.

Well, that's all for this month. I hope you enjoy the assortment of frequencies. I will have more of the same for you next month. Till then....

73's-Bob

MONITORING & THE LAW

Send information or questions to:
Roger W. West (MN-052), P.O. Box 52, Balsam Lake, WI 54810

RCMA Handicapped Representative

Send questions or newspaper and magazine articles of interest that relate to the hobby of monitoring and will be of aid to our handicapped members.

Send to : Roger West, P.O. Box 52, Balsam Lake, WI 54810

Hello Members! As you can see something new is coming to part of the MONITORING AND THE LAW Column. Starting with this issue, I will be come the RCMA HANDICAPPED REPRESENTATIVE. Having been corresponding with Mrs. Carol Ruth, the General Manager and Mr. William Mauldin, the General Editor, it was decided that I would become the RCMA handicapped representative on a trial basis to see if you the membership would like something like this to be a permanent part of the "Monitoring and the Law" column. It will cover questions and newspapers and magazine articles that are of interest that relate to the hobby of monitoring and will be of an aid to our handicapped members. I would like for you the members to write me as to what you would like to see in this column. I will be doing this as part of the MONITORING AND THE LAW Column for the next couple of issues. If there is not enough interest in this part of the column, I will have to discontinue it. So please take a few minutes to let me know of your ideas.

Good Listening,

Roger

NEWS MEDIA COMMUNICATIONS

This column is for reporting frequency and radio systems information of news media. Send related reports and questions on newspaper, radio, television, magazine, film production companies, etc. to:

Allen G. Henney, MD-069, 6912 Prince Georges Ave, Takoma Park, MD 20912

THIS MONTH WE HAVE A VERY NICE LISTING FOR THE TIDEWATER AREA OF VIRGINIA FROM LYNN BURKE. LYNN'S LIST IS VERY MUCH APPRECIATED AS IT IS THE FIRST LISTING FOR THE VIRGINIA NEWS MEDIA THAT I HAVE RECEIVED. LYNN NOTES THAT IT CAME FROM THE ENGINEERING DEPARTMENT OF AN AREA TELEVISION STATION. ITS REAL NICE TO GET SUCH AN "INSIDE" LISTING FOR THE TIDEWATER AREA MEDIA! UNFORTUNATELY LYNN ALSO MENTIONS SEEING A CELLULAR ANTENNA ON A WTKR-TV CAR RECENTLY.

SISTER STATIONS WITH DIFFERENT NAMES THAT USE THE SAME FREQUENCY APPEAR TOGETHER WITH AN "&". THANKS LYNN FOR YOUR GREAT MEDIA FREQUENCY LISTING! REAL NICE...

TIDEWATER, NORFOLK, NEWPORT NEWS, HAMPTON VIRGINIA AREA MEDIA

FREQUENCY	LICENSEE	CITY	CALL SIGN	COMMENTS
26.17ØØ	WVEC-TV	HAMPTON-NORFOLK		LOW-POWER IFB
26.25ØØ	WTKR-TV	NORFOLK		LOW-POWER IFB

26.4500	WAVY-TV	PORTSMOUTH-NORFOLK-NN	KB55956	LOW-POWER IFB
153.0500	WGAI-AM	ELIZABETH CITY	KJ5219	REMOTE PICKUP
161.6400	WGH-AM &			
	WRSR-FM	NEWPORT NEWS-NORFOLK	KIR364	REMOTE PICKUP
161.6700	WCMS AM/FM	NORFOLK	KIY674	REMOTE PICKUP/TWO-WAY
161.6700	WTAR-AM	NORFOLK	KIW905	TRAFFIC REPORT SETUP
161.7300	WNOR-AM/FM	NORFOLK	KGM282	REMOTE PICKUP
161.7300	WTAR-AM	NORFOLK	KIW905	TWO-WAY
161.7300	WVAB-AM	VIRGINIA BEACH	KA2901	REMOTE PICKUP
161.7600	WAVY-TV	PORTSMOUTH-NORFOLK-NN	KA88708	ARS/MOBILE
161.7600	WNOR-AM/FM	NORFOLK	KGM282	REMOTE PICKUP
166.2500	WLPM-AM &			
	WFOG-FM	SUFFOLK	KK4883	REMOTE PICKUP
170.1500	WGH-AM &			
	WRSR-FM	NEWPORT NEWS-NORFOLK	KIR264	TWO-WAY
450.0500	WVEC-TV	HAMPTON-NORFOLK	KB9629	NEWS/CAR REPEATER
450.1500	WVEC-TV	HAMPTON-NORFOLK	KSR772	F1 ENGINEERING/MOBILE/RP
450.2125	WGH/WRSR	NORFOLK-NEWPORT NEWS	KS7845	HH/ARS MOBILE
450.2500	WMBG-AM &			
	WQSF-FM	WILLIAMSBURG	KT4148	RPU
450.3125	WTKR-TV	NORFOLK		APPLIED FOR
450.4125	WAVY-TV	PORTSMOUTH-NORFOLK-NN	KQB270	NEWS BASE/MOBILE SIMPLEX
450.4875	WVEC-TV	HAMPTON-NORFOLK	KPG654	F3 NEWS/CAR REPEATER
450.5500	WPMH-AM	PORTSMOUTH	KSQ555	RPU/NOT IN USE
450.5875	WTKR-TV	NORFOLK	WYR228	NEWS/TWO-WAY/REPEATER
450.6125	WWDE-FM	HAMPTON-NORFOLK	WYR278	TWO-WAY SIMPLEX
450.7000	CBN	VIRGINIA BEACH	KE5783	USE UNKNOWN
450.7000	WTAR-AM &			
	WLTY-FM	NORFOLK	KA88544	REMOTE PICKUP
450.8000	WTAR-AM &			
	WLTY-FM	NORFOLK	KA2154	REMOTE PICKUP
450.8500	WPEX-AM	HAMPTON &		
	WWDE-FM	NORFOLK	KA88544	REMOTE PICKUP
450.8500	WNSB-FM	NORFOLK	UNKNOWN	REMOTE PICKUP
455.0500	WNIS	NORFOLK	KIY502	TRAFFIC REPORTS
455.1500	WVEC-TV	HAMPTON-NORFOLK	KPG210	ENGINEERING
455.3125	WTKR-TV	NORFOLK		APPLIED FOR
455.4875	WVEC-TV	HAMPTON-NORFOLK	KPG742	NEWS/CAR AND HANDHELD
455.5500	WKGM	SMITHFIELD	KT7294	REMOTE PICKUP
455.5875	WTKR-TV	NORFOLK	KYR227	NEWS/BASE AT STUDIO
455.6500	WKEZ-FM	YORKTOWN	KC4994	REMOTE PICKUP-NOT IN USE
455.7000	WTAR-AM &			
	WLTY-FM	NORFOLK	KA2154	REMOTE PICKUP
455.7500	WFOS	CHESAPEAKE		(HAND WRITTEN ON THE LIST)
455.8000	WKEZ-FM	YORKTOWN	KC4994	REMOTE PICKUP-NOT IN USE
455.8500	WFOS	CHESAPEAKE		(HAND WRITTEN ON THE LIST)

HOPE TO SEE YOU ALL NEXT MONTH WITH THE ANNUAL INDEX.

GOOD NEWS & GOOD ŁCANNERING...

Allan

RCMA has a Telephone Number

The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.

Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.

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PUBLIC SAFETY

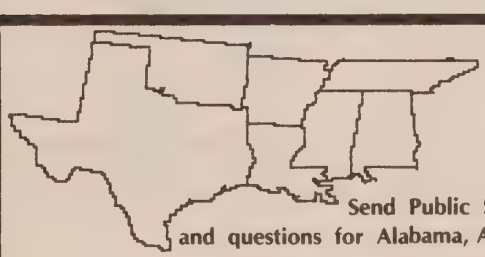
This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for poilice, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

Associated Public-Safety Communications Officers, Inc.

OFFICIAL TEN SIGNAL LIST

APCO states the numbering, sequence, words or word phrasing of the below listed signals may no be altered, nor may the reserved signals be otherwise implemented except by APCO. Any user may employ signal numbers upward, beginning with 10-40, as needed for local dispatching. RCMA publishes this listing in support of APCO and their uniform dispatch code efforts. We will print other dispatch codes, different from the OFFICIAL APCO listing, only to assist our membership in their continued monitoring hobby. It is hoped you find this listing useful.

10-1	Signal weak	10-19	(In) contact
10-2	Signal good	10-20	Location
10-3	Stop transmitting	10-21	Call ( ) by phone
10-4	Affirmative (OK)	10-22	Disregard
10-5	Relay (to)	10-23	Arrived at scene
10-6	Busy	10-24	Assignment completed
10-7	Out of service	10-25	Report to (Meet)
10-8	In service	10-26	Estimated time of arrival
10-9	Say again	10-27	License/Permit Information
10-10	Negative	10-28	Ownership Information
10-11	( ) on duty	10-29	Records check
10-12	Stand by (stop)	10-30	Danger/Caution
10-13	Existing conditions	10-31	Pick up
10-14	Message/Information	10-32	( ) units needed (Specify)
10-15	Message delivered	10-33	Help me quick
10-16	Reply to message	10-34	Time
10-17	Enroute	10-35 through 10-39 are reserved for future assignment by APCO. User option 10-40 upward.	
10-18	Urgent		



PUBLIC SAFETY - SOUTH CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details, and questions for Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas to

Ed Lentz, 609 Yorkshire, Pasadena, TX 77503-1450

GEnie - ELENTZ DELPHI - THISARSE COMPUSERVE - 72645,172

Hello and welcome to Public Safety - South Central for the month of November. Now is a good time to go out and make sure the antennas and coax for your scanners are all in good shape for the winter. It sure would be better to fix them up now rather than wait till one of those cold winter storms comes around and shows you the error of your ways.

I would like to thank the ST. LOUIS ALL-BAND RADIO ENTHUSIASTS for inviting me to one of their meetings. Spent a very enjoyable Sunday afternoon learning more about some of the radio systems in the area. If any of you live in the area you should check out this group. There was even a reader of two of this column in the group.

Not to waste any more of you time we'll get right down to business. Allan Koenig (TX-178) has presented a very interesting question to the Dallas area monitors. I'll include Allan's description and if any of you know what was going on please inform either Allan or I an explanation. His address is:

Allan Koenig (TX-178)
6838 Lupton
Dallas, Texas 75225-2722

> I was monitoring around mid-morning when I came across a "Practice Signal 7Ø" on Channel 11 - the one that investigators use. The "Practice Sig. 7Ø" involved something called "tracking elements," who were getting "signals" that were either strong or weak. The dispatcher on Channel 11 would periodically tell the elements that a particular area was either "hot" or "cold". For example he would say, "Richardson and North Central [sub-stations of Dallas PD] are hot, University Park is cold." The tracking elements were going up major streets looking for a white male with a given description. They all converged on a hotel in far North Dallas where they were getting the strongest signal.

Any help from the other Dallas area monitors in explaining more of what frequencies the tracking elements are using and how the system operates would be appreciated.

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NOTICE

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At this time I am not aware of anyone trying to keep a listing of frequencies that have appeared in previous newsletters, not even myself. Occasionally I will receive a request from old and new members for frequencies from a certain area and I try and get the information together for them, but it takes time, occasionally more time than I have. What I am going to try and do is enter frequencies into a database as I receive them for the newsletter. In order to get all the information that is needed in a readable/usable form I have to print them out using a condensed print. This will make the print in the newsletter smaller for the frequency list. I have reduced the printout with a copy machine and it came out very readable. What will happen with the printers I don't know. I first did this in the October newsletter and I won't know till the middle of September how it all turned out. If all works out, you will be able to see the format that I am trying to use and if you could include as much of this information in your contributions it would help greatly. The rewards, I will be able to generate a frequency list by State within a few minutes that will include everything that has appeared in all past newsletters.
Now on to what you paid for.

ARKANSAS

The following was sent in by a couple of contributors from Arkansas. Jeff (AR-Ø1Ø) and Lee (AR-Ø2Ø). Lee is also looking for a list of Arkansas State Police Codes for Troop F and Bastrop Police Department Signals.

Crossett Police Department Codes

Ø1 Murder and Nonnegligent Homicide
Ø2 Forcible Rape
Ø3 Robbery
Ø4 Aggravated Assault
Ø5 Burglary
Ø5A Alarm in area_____.
Ø6 Theft of property and shoplifting
Ø7 Auto theft
Ø8 Arson
Ø9 Gas up car, wash car, and maintenance to car
1Ø Traffic Stop
1ØA Traffic Stop Citation Issued
11 Vandalism
12 Meals/Lunch etc.
13 Disturbance Call
14 Traffic Accident PI-Person Injured
15 Assistance to motorists--Unlock Car
16 Security Check
17 Warrant Not Served

17A Warrant Served
18 Out at school zones--traffic and ballgames
19 Assistance to other department--Arkansas State Police
20 Go to Bank
21 Out at P.D.
22 Out at judge's office
23 Errands for front office (City Hall)
24 Assistance to other departments--Ashley County S.O.
25 Shift Change
26 Talking to subject upon request

RCMA DATABASE
by STATE

COUNTY OF...	CITY OF.....	AGENCY / COMPANY.....	USED FOR / BY.....	CH..	RPT OUT	RPT INPUT	CALL SIGN
** STATE OF: AR							
ASHELY	COUNTY	SHERIFF OFFICE	HAMBURG REPEATER	F1	154.8300	0.0000	
ASHELY	COUNTY	SHERIFF OFFICE		F2	154.9500	0.0000	
ASHELY	COUNTY	SHERIFFS OFFICE	PAGER - BASE		37.0600	0.0000	
ASHELY	CROSSETT	FIRE DEPARTMENT	BASE		155.7150	0.0000	
ASHELY	CROSSETT	POLICE DEPARTMENT	BASE		155.4900	0.0000	
ASHELY	SNYDER	STATE POLICE	TROOPS E & F REPEATER		155.6550	0.0000	
ASHELY	WEST CROSSETT	FIRE DEPARTMENT	FIRE PROTECTIONS ASSN.		154.1600	0.0000	
ASHLEY	COUNTY	LOCAL GOVERNMENT	ROAD DEPARTMENT		153.8750	0.0000	
ASHLEY	COUNTY	RESCUE SQUAD	DISPATCHED BY S.O.		155.0850	0.0000	
ASHLEY	CROSSETT	CIVIL DEFENSE	INTERCOMMUNICATIONS		158.7450	0.0000	
ASHLEY	CROSSETT	CROSSETT I.S.D.	BASE		155.2950	0.0000	
ASHLEY	FOUNTAIN HILL	FIRE DEPARTMENT	DISPATCHED BY S.O.		155.0850	0.0000	
ASHLEY	HAMBURG	ASHLEY COUNTY RESCUE			155.0850	0.0000	
ASHLEY	HAMBURG	FIRE DEPARTMENT	DISPATCHED BY S.O.		155.0850	0.0000	
ASHLEY	HAMBURG	POLICE DEPARTMENT	DISPATCHED BY S.O.		154.8300	0.0000	
ASHLEY	HAMBURG	POLICE DEPARTMENT	MOBILES		155.7000	0.0000	
ASHLEY	MILO	FIRE DEPARTMENT	DISPATCHED BY S.O.		155.0850	0.0000	
ASHLEY	MONTROSE	POLICE DEPARTMENT	DISPATCHED BY S.O.		154.8300	0.0000	
ASHLEY	NORTH CROSSETT	FIRE DEPARTMENT	BASE		155.9250	0.0000	
ASHLEY	PARKDALE	POLICE DEPARTMENT	DISPATCHED BY S.O.		154.8300	0.0000	
ASHLEY	PORTLAND	MAINLINE AMBULANCE SVC	BASE - PAGERS		155.1750	0.0000	
ASHLEY	PORTLAND	POLICE DEPARTMENT	DISPATCHED BY S.O.		154.8300	0.0000	
ASHLEY	SNYDER	GAME AND FISH			151.1750	0.0000	
ASHLEY	WILMOT	POLICE DEPARTMENT	DISPATCHED BY S.O.		154.8300	0.0000	
BRADLEY	COUNTY	SHERIFF OFFICE	REPEATER - WARREN		154.0550	0.0000	
BRADLEY	WARREN	STATE POLICE	TROOP F BASE		44.7400	0.0000	
CALHOUN	COUNTY	SHERIFF OFFICE	HAMPTON BASE		37.0400	0.0000	
CHICOT	COUNTY	SHERIFF OFFICE	LAKE VILLAGE BASE		37.0400	0.0000	
CHICOT	DERMOTT	POLICE DEPARTMENT	BASE		37.0400	0.0000	
CHICOT	EUDORA	POLICE DEPARTMENT	BASE		37.0400	0.0000	
CHICOT	EUDORA	POLICE DEPARTMENT	BASE		154.8150	0.0000	
CLARK	COUNTY	POLICE DEPARTMENT	DISPATCH		37.0400	0.0000	
CLARK	COUNTY	SHERIFF OFFICE	DISPATCH		37.0400	0.0000	
DALLAS	COUNTY	SHERIFF OFFICE	PRINCTON REPEATER		452.8750	0.0000	
DALLAS	FORDYCE	POLICE DEPARTMENT	BASE		37.0200	0.0000	
DESHA	COUNTY	SHERIFF OFFICE	BASE ARKANSAS CITY		37.1200	0.0000	
DESHA	DUMAS	STATE POLICE	TROOP E BASE		44.6200	0.0000	
DESHA	DUMAS	STATE POLICE	TROOP E MOBILE		44.6600	0.0000	
DREW	COUNTY	SHERIFF OFFICE	DISPATCH BY MONTICELLO PD		37.0800	0.0000	
DREW	MONTICELLO	FORESTRY COMMISSION			151.2500	0.0000	
DREW	MONTICELLO	POLICE DEPARTMENT	BASE		37.0800	0.0000	
GARLAND	70 WEST	FIRE DEPARTMENT	DISPATCH		154.4150	0.0000	
GARLAND	COUNTY	LOCAL GOVERNMENT	UNKNOWN		453.6250	458.6250	
GARLAND	COUNTY	SHERIFF OFFICE	DISPATCH		154.8450	0.0000	
GARLAND	HOT SPRING	PUBLIC WORKS	GARBAGE COLLECTION		155.8800	0.0000	
GARLAND	HOT SPRINGS	AMI HOSPITAL			155.2050	0.0000	
GARLAND	HOT SPRINGS	ARKLA GAS	UNKNOWN		153.4100	0.0000	
GARLAND	HOT SPRINGS	CABLE TV			464.2750	469.2750	
GARLAND	HOT SPRINGS	CORPS OF ENGINEERS	UNKNOWN		38.8900	0.0000	
GARLAND	HOT SPRINGS	FIRE DEPARTMENT	DISPATCH		154.3400	0.0000	
GARLAND	HOT SPRINGS	GAME AND FISH			151.1750	0.0000	
GARLAND	HOT SPRINGS	GAME AND FISH			151.3850	0.0000	
GARLAND	HOT SPRINGS	HAMS			146.8800	0.0000	
GARLAND	HOT SPRINGS	HAMS			147.1800	0.0000	

RCMA DATABASE
by STATE

COUNTY OF...	CITY OF.....	AGENCY / COMPANY.....	USED FOR / BY.....	CH..	RPT OUT	RPT INPUT	CALL SIGN
GARLAND	HOT SPRINGS	HIGHWAY DEPARTMENT			151.0550	0.0000	
GARLAND	HOT SPRINGS	HIGHWAY DEPARTMENT			151.0700	0.0000	
GARLAND	HOT SPRINGS	HIGHWAY DEPARTMENT			151.0850	0.0000	
GARLAND	HOT SPRINGS	HIGHWAY DEPARTMENT			151.1000	0.0000	
GARLAND	HOT SPRINGS	HOT SPRINGS MEMORIAL	MEMPHIS CENTER		118.8500	0.0000	
GARLAND	HOT SPRINGS	HOT SPRINGS MEMORIAL	TOWER		120.3000	0.0000	
GARLAND	HOT SPRINGS	HOT SPRINGS MEMORIAL	UNICOM		123.0000	0.0000	
GARLAND	HOT SPRINGS	HOT SPRINGS VILLAGE	UNKNOWN		153.8600	0.0000	
GARLAND	HOT SPRINGS	MAGIC SPRINGS			154.5150	0.0000	
GARLAND	HOT SPRINGS	OAKLAWN RACE TRACK	UNKNOWN		151.6550	0.0000	
GARLAND	HOT SPRINGS	POLICE DEPARTMENT	DISPATCH		155.4150	0.0000	
GARLAND	HOT SPRINGS	PUBLIC WORKS	WATER DEPARTMENT		453.6750	458.6750	
GARLAND	HOT SPRINGS	ST JOSEPH HOSPITAL			155.3400	0.0000	
GARLAND	HOT SPRINGS	STATE POLICE	UNKNOWN		44.7400	0.0000	
GARLAND	HOT SPRINGS	STATE POLICE			151.0100	0.0000	
GARLAND	HOT SPRINGS	STATE POLICE			159.0900	0.0000	
GARLAND	HOT SPRINGS	YELLOW CAB			152.4500	157.7100	
GARLAND	HOT SPRINGS	YELLOW TRANSIT			453.7750	458.7750	
GARLAND	LAKE HAMILTON	FIRE DEPARTMENT	DISPATCH		154.4450	0.0000	
GARLAND	MORNING STAR	FIRE DEPARTMENT	DISPATCH		154.2650	0.0000	
HOT SPRING	BISMARK	FIRE DEPARTMENT	DISPATCH		154.3100	0.0000	
HOT SPRING	BISMARK	HAMS			146.6850	0.0000	
HOT SPRING	COUNTY	SHERIFF DEPARTMENT	DISPATCH		37.3000	0.0000	
HOT SPRING	MALVERN	FIRE DEPARTMENT	DISPATCH		155.8350	0.0000	
HOT SPRING	MALVERN	FIRE DEPARTMENT	DISPATCH		158.8050	0.0000	
HOT SPRING	MALVERN	HAMS			147.3600	0.0000	
HOT SPRING	MALVERN	POLICE DEPARTMENT	DISPATCH		37.3400	0.0000	
HOWARD	COUNTY	SHERIFF OFFICE	DISPATCH		155.0700	0.0000	
JOHNSON	PINEY-FT LAKE	FIRE DEPARTMENT	DISPATCH		154.2350	0.0000	
LINCOLN	STAR CITY	GAME AND FISH			151.1750	0.0000	
MONTGOMERY	COUNTY	SHERIFF DEPARTMENT	MT. IDA DISPATCH	F2	37.2800	0.0000	
MONTGOMERY	MOUNT IDA	FIRE DEPARTMENT	DISPATCH		155.5950	0.0000	
PIKE	COUNTY	SHERIFF OFFICE	DISPATCH		154.7550	0.0000	
POLK	MENA	HAMS			146.7900	0.0000	
POLK	MENA	POLICE DEPARTMENT	DISPATCH		155.5500	0.0000	
PULASKI	LITTLE ROCK	HAMS			146.9400	0.0000	
SALINE	BENTON	POLICE DEPARTMENT	DISPATCH		155.5800	0.0000	
STATEWIDE		POLICE DEPARTMENT	INTERCOMMUNICATIONS		37.2000	0.0000	
STATEWIDE		POLICE DEPARTMENT	INTERCOMMUNICATIONS		37.2400	0.0000	
STATEWIDE		SHERIFF DEPARTMENT	INTER-AGENCY		37.2400	0.0000	
STATEWIDE		SHERIFF OFFICE	INTERCOMMUNICATIONS		37.2400	0.0000	
STATEWIDE		SHERIFFS OFFICE	INTERCOMMUNICATIONS		37.2000	0.0000	
UNION	COUNTY	SHERIFF OFFICE	EL DORADO REPEATER		154.8150	0.0000	
UNION	EL DORADO	FIRE DEPARTMENT	BASE		155.4450	0.0000	
UNION	EL DORADO	POLICE DEPARTMENT	REPEATER		154.7400	0.0000	
UNION	NEW LONDON	GAME AND FISH			151.1750	0.0000	
YELL	COUNTY	POLICE DEPARTMENT	DISPATCH		37.0800	0.0000	

LOUISIANA

The following was also contributed by Lee (AR-Ø2Ø)

RCMA DATABASE
by STATE

COUNTY OF...	CITY OF.....	AGENCY / COMPANY.....	USED FOR / BY.....	CH..	RPT OUT	RPT INPUT	CALL SIGN
** STATE OF:	LA						
MOREHOUSE	BASTROP	FIRE DEPARTMENT	REPEATER		154.1900	0.0000	
MOREHOUSE	BASTROP	POLICE DEPARTMENT	REPEATER		155.5350	0.0000	
MOREHOUSE	PARISH	SHERIFF OFFICE	BASTROP BASE		39.5600	0.0000	
QUACHITA	MONROE	FIRE DEPARTMENT	DISPATCH		154.4150	0.0000	
QUACHITA	MONROE	METRO AMBULANCE SERVICE	DISPATCH		462.9500	467.9500	
QUACHITA	MONROE	POLICE DEPARTMENT	DISPATCH		155.0100	0.0000	

OUACHITA	MONROE	STATE POLICE	TROOP F BASE	39.3000	0.0000
STATEWIDE		POLICE DEPARTMENT	INTERCOMMUNICATIONS	39.5000	0.0000
STATEWIDE		SHERIFF OFFICE	INTERCOMMUNICATIONS	39.5000	0.0000

MISSISSIPPI

The following was contributed by John (MS-Ø17). We definitely could use more from the state of Mississippi. Come on folks, it's starting to get cold outside so spend a few minutes and let us know what frequencies are being used in your area.

RCMA DATABASE
by STATE

COUNTY OF...	CITY OF.....	AGENCY / COMPANY.....	USED FOR / BY.....	CH..	RPT OUT	RPT INPUT	CALL SIGN
** STATE OF: MS							
COPIAH	COUNTY	SHERIFF OFFICE			45.1400	0.0000	
COPIAH	COUNTY	SHERIFF OFFICE			45.2200	0.0000	
COPIAH	COUNTY	SHERIFF OFFICE			45.2600	0.0000	
COPIAH	CRYSTAL SPRINGS	FIRE DEPARTMENT			155.1150	0.0000	
COPIAH	CRYSTAL SPRINGS	POLICE DEPARTMENT			155.3100	0.0000	
COPIAH	HAZLEHURST	FIRE DEPARTMENT			154.4150	0.0000	
COPIAH	HAZLEHURST	POLICE DEPARTMENT			45.4600	0.0000	
HINDS	COUNTY	SHERIFF OFFICE			45.1800	0.0000	
HINDS	COUNTY	SHERIFF OFFICE			155.5650	0.0000	
HINDS	COUNTY	SHERIFF OFFICE			155.6550	0.0000	
HINDS	COUNTY	UNKNOWN			155.7450	0.0000	
HINDS	JACKSON	AMBULANCES			155.2650	0.0000	
HINDS	JACKSON	AMBULANCES			155.4000	0.0000	
HINDS	JACKSON	FIRE DEPARTMENT			453.5000	458.5000	
HINDS	JACKSON	JACKSON CABLE COMPANY			464.2000	469.2000	
HINDS	JACKSON	METRO CENTER MALL	SECURITY		461.2000	466.2000	
HINDS	JACKSON	NORTHPARK MALL	SECURITY		464.4250	469.4250	
HINDS	JACKSON	POLICE DEPARTMENT		F1	460.0500	465.0500	
HINDS	JACKSON	POLICE DEPARTMENT		F2	460.2000	465.2000	
HINDS	JACKSON	POLICE DEPARTMENT		F3	460.1000	465.1000	
HINDS	JACKSON	POLICE DEPARTMENT		F4	460.1500	465.1500	
HINDS	JACKSON	POLICE DEPARTMENT		F5	460.0250	0.0000	
HINDS	JACKSON	POLICE DEPARTMENT		F6	460.3000	465.3000	
HINDS	JACKSON	POLICE DEPARTMENT		F7	460.3500	0.0000	
HINDS	JACKSON	POLICE DEPARTMENT		F8	460.4000	0.0000	
HINDS	JACKSON	WAPT - TV 16			161.7000	0.0000	
HINDS	JACKSON	WJTV - TV 12			463.8500	0.0000	
HINDS	JACKSON	WLBT - TV 3			161.7300	0.0000	
HINDS	JACKSON	WLBT - TV 3			450.6125	0.0000	
LINCOLN	BROOKHAVEN	HIGHWAY PATROL			42.0800	0.0000	
LINCOLN	BROOKHAVEN	HIGHWAY PATROL			42.3000	0.0000	
LINCOLN	BROOKHAVEN	POLICE DEPARTMENT			155.2500	0.0000	
MADISON	RIDGELAND	POLICE DEPARTMENT			155.7000	0.0000	
MINDS	JACKSON	LOCAL GOVERNMENT	CITY BUSSES		453.9000	458.9000	
RANKIN	PEARL	POLICE DEPARTMENT			155.6850	0.0000	
STATEWIDE		HIGHWAY PATROL			42.1800	0.0000	
STATEWIDE	JACKSON	HIGHWAY PATROL			42.1200	0.0000	

TEXAS

At this time plans are being made for a FOURTH ANNUAL TEXAS CONVENTION. In the past meetings were held in Austin, Rusk, and Pasadena. This year we would like to have the meeting around the Dallas/Ft Worth area and hopefully it will help to encourage the members from that area to attend. What we need is someone to line up a meeting location. The job isn't very hard. All you have to do is contact a Public Library or some other location that has rooms available for FREE use. Some suggestions are Fire Stations, Shopping Centers, Banks, and of course Public Libraries. It would help for them to have copy machines available but this is not necessary. If you would like more information or would like to arrange for the meeting to be held in your area, please contact either me or David Litsinger. David can be

reached by writing him at:

AUSTIN RADIO CLUB
DAVID LITSINGER
PO BOX 17142
AUSTIN, TX 78760

Received several letters from Brad Carpenter while I was on vacation. Seems that Richland Hills PD (483.0125) is now using DVP. Lets wish them bad luck with it. Arlington PD is still using 154.935 as a car to car frequency and may be designated as Channel H. The other channels on their new 800 MHz system are:

A 856.4875
B 857.4875
C 858.4875
D 859.4875
E 860.4875

Thanks Brad. If everyone contributed as much as you did we wouldn't have enough room for it all.

Thanks to all who submitted their frequency list for this month. We could use more. I would welcome any comments for the look of the column the past two months. If the database format works, what else do we need in the list? Is there too much included. What works for me may not work for you folks. You have to tell me something or I will continue to do this column the way I want.

PUBLIC SAFETY NORTH CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details and questions as follows—Iowa, Kansas, Minnesota, Missouri, Nebraska, North and South Dakota:

Michael W. Scheel, 25265 35th Ave, Walcott IA 52773

Welcome to the November editon of Public Safety - North Central.

>>>>>> IOWA

Davenport PD has a new state of the art console for its dispatchers. According to a short news item it will be the star in a public relation commercials on TV. To promote 911 which starts Sept 15th (a delay of two weeks from the original information given earlier in the year. (MWS IA-011)

The Great Mississippi Valley Fair

The Fair is actually the county fair for Scott County. The promoters of the originial fair in the 19th Century thought they could outdo the State Fair. Since back then going to fair was a week long trip. The first car vs. horse and car vs. airplane races in Iowa took place during the Fair. In recent years the fair having to compete with the BIX JAZZ Festival and the Hardees-Quad Cities OPEN has not been much of a fair.

464.100 R Fair Operations

460.150 m Davenport PD TAC 4: Police Explorers for Traffic and parking control

47.42 H American Red Cross: first aid, lost children

Firefighting services are from off duty DFD personnal who use a reserve engine. generally use 460.575 H TAC 3 fireground.

EMS is provided by Davenport Hospital Ambulance SVC. 155.400 bm

Scott County Disaster SVCS has a new mobile command post. It has radios for Davenport PD & FD, Bettendorf PD & FD, Scott County Sheriff, and rural fire districts with room for other as nneded agencies. They operated during the Fair as the command center. (MWS (IA-011)

>>>>>> Minnesota

more from M.R.H.

Hennepin County MN

39.900	Sheriff Water Patrol (no longer in use)	KAA517
45.660	Hennepin County Sheriff Intersystem (Base only)	KSL269
151.250	County Parks	KNJK843
153.830	Fire Tactical (HTs only)	KVD531
153.845	County Surveyers	KT2471
153.905	Input to 158.805 repeater (County Surveyers ?)	KH5938
154.010	Metro Fire Intersystem	KVD531
154.055	Sanitation Dept. (License & Consumer Services, Health Dept, Animal Control, Recycling Dept. MN Age & Opportunity Center MAO	KL2987
154.100	Sheriff Ch#6 (sheriff Patrol Division & Water Patrol)	KXR748
154.295	Statewide Fire Mutual Aid Intersystem	KVD531
154.355	Hennepin Fire Truck to Truck CH#2	KVD531
154.385	Hennepin Fire Primary CH#1	KVD531
154.800	Hopkins Police Dept. repeater (156.210m)	WYC894
155.010	input to 155.550 Carver County Sheriff Primary repeater	KC7278
155.055	Civil Defense & Siren activation channel	KLI316
155.325	Metropolitan District Hospital & Ambulance Freq.	KKV897
155.340	Hospital Statewide Intersystem (HEAR)	KKV897
155.370	Point to Point Intersystem (Base only)	KAA517
155.475	Statewide Police Emergency Intersystem (MINSEF) Ch#4	KAA517
155.610	Hennepin Sheriff South Ch#1 rptr (154.830m)	KAA517
155.805	Hennepin Sheriff Ch#2 (car to car)	KL5549
155.820	Hennepin Sheriff Ch#3 (Emergency) rptr (154.995m)	KAZ445
155.820	Hennepin Sheriff Tactical Simplex	KL5549
155.850	Hennepin Sheriff North Ch#5 (154.755)	KAA517
156.150	input to 155.250 Scott County Sheriff Primay repeater	KC7278
156.210	input to 154.800 Hopkins Police Dept. repeater	WYC894
158.805	? repeater (153.905m)	KDS645
453.150	Hennepin County Medical Center (HCMC) Security	KDD395
453.475	Shared RPT #1 (Park Reserve District, County Home School, Juvenile & Adult Correctional Facilites)	
453.575	Shared RPT #2 (Government Center Maintenance, Security, Court Services, Dept. of Economic Assistance & Juvenile Center)	KWL349
453.800	?	KNIW498
453.900	Hennepin County Highway Dept.	KRB448
460.200	Civil Division & Warrants Division	KYV218
460.275	Metro-Emergency Police Intersystem	KTI218
460.300	?	KTI796
460.400	Police Printer Channel	KTI796

>>>>>> MISC.

That is it for another month. Next month is the state and county highway maint, and the end year index.

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PUBLIC SAFETY—GREAT LAKES

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows—Illinois, Indiana, Wisconsin, Michigan, Kentucky, and Ohio:

David Wilcox, 1711 Excalibur Drive, Janesville, WI 53545

Welcome to the November column of PUBLIC SAFETY-GREAT LAKES. The mailman has been rather kind the past month, so I've got plenty of input for this month and a good start on next month. We still would like to hear from Ohio, Indiana, Michigan, and Kentucky I know that we have members in those states and I'm sure that they would like to read something about there area, and I sure would like to print it. Lets start a fall and winter push from those states so that every state and area gets equal coverage. Well enough of the begging now down to the good stuff.

From MICHIGAN:

Russ (MI-002) Has some info on the crash of Northwest airlines flight #255 at Detroit Metropolitan Airport. The Crash occurred on August 16, 1987 at 8:45PM, seconds after takeoff

The rescue operation was coordinated by the Wayne county sheriff's dept., which had arrived at the scene within minutes. Mutual aid was received from over forty jurisdictions, in the form of police, fire, ambulances and helicopters from the Detroit police dept. and the US Coast Guard. Also responding were private ambulance companies. The Ham radio operators were responding to different area hospitals to give assistance if needed.

The T.V. news media assisted with the use of their lighting equipment.

The toll was 157 dead (including 3 on the ground). A four year old girl was the only passenger to survive. Her condition has been upgraded from Critical to serious. about a half-Dozen persons on the ground were injured, most were treated and released.

The Frequencies that Russ Monitored were.

155.865	Command Post (Statewide Emergency Freq.)
155.700	Wayne County Sheriff
154.370	Fire net
145.330	Hams
147.140	Hams

Responding police units reported to the sheriff's dept for assignment. Fire units reported to the Romulus fire chief for assignment.

The airport is located in the city of Romulus, Michigan about 25 miles west of Detroit.

Thanks **Russ** for a great report on such a tragic accident, that must have been several hours of very interesting monitoring.

From ILLINOIS:

To start out with we have another Listener's Profile.

Listening area: Peoria-Tazewell-Woodford Counties **John (IL-010)**

460.050	Peoria City Of UHF 1
460.250	Peoria City Of UHF 2
460.325	Peoria City Of UHF 3
154.875	Peoria City Of ISPERN 2
158.850	Peoria City Of Command Units
460.525	Peoria Heights PD
155.715	Peoria Heights Public works & PD
154.145	Peoria City Fire
154.370	Most Peoria County area Volunteer FD's
154.250	Pekin, No. Pekin Fire
155.865	Creve Coeur Fire
154.980	Marquette Heights Police & Fire
154.205	East Peoria Fire
154.265	Fire Dept's Mutual Aid (Seldom Used)
155.775	Peoria City Public Works and Civil Defense
45.44	Weather Warning Net
146.850	Peoria area Amateur radio club
146.76	Heart Of Ill. Repeater Club (Weather Net)
146.970	BFD Repeater Club
147.270	Woodford Co. Emergency Services (WX) Net
453.550	Woodford Co. Police
460.075	East Peoria Police
460.425	East Peoria Police
460.150	Pekin Police Ch. 1
460.200	Pekin Police Ch. 2
460.175	Washington Police
464.525	Peoria Civic Center
453.225	Ill. Central Collage (PD & Maint)
155.550	Morton Police
158.730	Peoria County Sheriff
158.790	Peoria County Sheriff Ch. 2
453.275	Greater Peoria Airport Police & Maint
155.070	Tazewell County Sheriff (Rptr)
155.640	Tazewell County Sheriff
155.220	Ambulance Dispatch "C-MED"
155.340	Ambulances to Hospitals
154.905	State Police Criminal Investigations
155.520	State Police, Peoria (Dist. 8)
155.475	ISPERN (Ill State Police Emer. Radio Net.)
155.370	State Police Point to Point With Cities
155.460	State Police License Checks/Misc.
42.360	State Police, Peoria (Dist. 8)

42.500	State Police, Statewide Car to Car
47.380	State Highway Dept (Mobile)
47.300	State Highway Dept (Base)
155.610	North Pekin Police
154.100	Bartonville Police and Fire
154.325	Chillicothe Fire
39.50	Tazewell County Sheriff & Animal Control
155.670	Chillicothe Police
162.475	Weather (Located in Creve Coeur)

Thanks **John** for a great List.
Next from **Dave (IL-354)** we have a large contribution regarding the area of Northern Illinois.

FIRE	
Algonquin	154.250
Barrington	154.890
Bartlett	154.310
Batavia	154.070
Burlington	154.070
Carpentersville	154.430
Cary	154.250
Crystal Lake	156.165
East Dundee	154.430
Elburn	154.070
Elgin	460.575
Geneva	154.070
Hampshire	154.070
Hanover Park	154.310
Hoffman Estates	855.4625
Huntley	154.250
Palatine	154.340
Pingree Grove	154.070
St. Charles	154.070
Schaumburg	154.235
South Elgin	154.430
West Dundee	154.430
Rutland Dundee	154.430
Streamwood	154.310
Nunda Rural	154.250

POLICE	
Algonquin	154.740
Barrington	470.8125
Bartlett	470.6875
Batavia	470.9375
Burlington	159.150(Kane)
Carpentersville	471.1625
Cary	155.880
Crystal Lake	155.700
East Dundee	471.1625
Elburn	159.150(Kane)
Elgin	855.2125
Geneva	470.9375
Hampshire	159.150(Kane)
Hanover Park	470.6875
Hoffman Estates	855.7125
Huntley	155.79(McHenry)
Palatine	856.7125
Pingree Grove	159.150(Kane)
St. Charles	470.9375
Schaumburg	155.550
South Elgin	155.685
West Dundee	471.1625
Sleepy Hollow	471.1625
Streamwood	155.430

HOSPITALS

Elgin Mental Health Center
155.220 453.875
Delnor Community 155.340
Humana 155.400
Northern Ill. Medical Center
155.400
St. Joe's(Elgin) 155.400
Sherman (Elgin) 155.400
Good Shepard 155.400
ALL HAVE MED CHANNELS

COUNTY SHERIFF	
Cook County North	155.595
Cook County South	155.535
Lake County	156.210
Kane County	159.150
Mchenry County	155.790
Dupage County	852.6625
	854.9625

M.A.B.A.S.
(Mutual Aid Box Alarm System)

DIVISION 1 - Arlington Hts.
NW Center
DIVISION 2 - Carpentersville
Firecom
DIVISION 3 - Niles
R.E.D. Center
DIVISION 4 - Lake Forest
DIVISION 5 - Crystal Lake
Crystal Lake Region
DIVISION 6 - North Lake
DIVISION 7 - Hillside
DIVISION 8 - Rockford
DIVISION 9 - Chicago
DIVISION 10 - Tri State

STATE POLICE

Dist. 1 Sterling	42.520
	154.905
Dist. 2 Elgin	42.620
	154.695
Dist. 3 Chicago	42.560
	154.905
Dist. 4 Crestwood	42.430
	154.680
Dist. 5 Joliet	42.6000
	154.920
Dist.16 Pecatonica	42.440
	154.680
Dist.17 LaSalle	42.460
	154.680
Dist.15 Oakbrook Tollways	
	855.9625
	855.7375

DIVISION 11 - Wheaton
Ducom
DIVISION 12 - Aurora

STATE PRIORITY FREQUENCIES

Fire Control	31.980	Low Freq Ch.6	39.460
Statewide low F2	42.500	Nuclear Safety	44.920
ESDA 45.280;45.360;45.440		Fire Control So.	151.445
DCI High Freq F2	154.905	E99 North & South	154.935
DCI High Freq F3	154.950	ESDA	155.025
IREACH F3	155.055	Point to Point	155.370
High Freq F4	155.460	Ispern F1	155.475
High Freq F2	155.520	DCI	156.000
Marine Distress Calling 156.800			

AREA AMBULANCES

Algonquin-LITH	2A29 ALS		2A26 ALS				
Burlington	2C11 BLS						
Bartlett	2D11 ALS						
Carpentersville	2C16 ALS	96	2C43 ALS	95			
Crystal Lake	2A35 ALS						
East Dundee	2C30 ALS	42					
Elgin	2C21 ALS	1	2C20 ALS	2			
	2C55 ALS	4	2C22 ALS	5			
EMED. Transport	2C44 ALS						
E.M.H.C.	2C29 BLS						
Hampshire	2C12 BLS		2C14 ALS				
Hanover Park	2E29 ALS		2E21 ALS		2E27 ALS		
Huntly	2A13 ALS		2A44 ALS				
Pingree Grove	2C33 ALS	1252	2C17 ALS	1251	2C49 BLS Truck		
Rutland, Dundee	2C31 ALS	54	2C36 ALS	55			
South Elgin	2C40 ALS		2C25 ALS		2C47 BLS		
Streamwood	2D115ALS		2D116ALS				
TEK MCH	2A66 ALS						
West Dundee	2C29 ALS	34					

Carpentersville & Countryside fire protection district radio signatures

90	Chief	931	2nd Engine Lieutenant
901	Deputy Chief	932	2nd Engine Lieutenant
902	Deputy Chief	941	2nd Engine Lieutenant
903	Captain	942	2nd Engine Lieutenant
904	Captain	951 thru 959	Paramedic
905	1st lieutenant	961 thru 969	Paramedic
907	1st lieutenant Fire Insp.	971	Fire Inspector
909	Communication Specialist	972	Fire Inspector
922	2nd Truck Lieutenant	992	Communication Supervisor
923	2nd Truck Lieutenant	999	Carpentersville ESDA

Also from **Dave (IL-354)** we get a list of the ten codes used by the Illinois Dept. of Law Enforcement they are as follows.

10-0	Caution	10-50	Accident (F,PI,PD)
10-1	Unable Copy	10-51	Wrecker Needed
10-2	Signal Good	10-52	Ambulance Needed
10-3	Stop Transmitting	10-53	Road Blocked At.....
10-4	Acknowledgment	10-54	Livestock on highway
10-5	Relay	10-55	Suspected (DUI)
10-6	Busy-Unless urgent	10-56	Intoxicated Ped.
10-7	Out of Service	10-57	Hit and Run (F,PI,PD)
10-8	In Service	10-58	Direct Traffic
10-9	Repeat	10-59	Convoy or Escort
10-10	Fight In Progress	10-60	Squad In Vicinity
10-11	Dog Case	10-61	Isolate Self For Message
10-12	Stand By	10-62	Reply to Message
10-13	Road Report	10-63	Prepare to make Copy
10-14	Prowler	10-64	Message For Local Deliv.
10-15	Civil Dist.	10-65	Net Message Assignment
10-16	Domestic	10-66	Message Cancellation
10-17	Meet Compl.	10-67	Clear For Net Message
10-18	Quickly	10-68	Dispatch Information
10-19	Return To.....	10-69	Message Received
10-20	Location	10-70	Fire

10-21	Call By Phone	10-71	Advise Nature of Fire
10-22	Disregard	10-72	Report Progress Of Fire
10-23	Arrived at Scene	10-73	Smoke report
10-24	Ass. Completed	10-74	Negative
10-25	Report In Person	10-75	In Contact With.....
10-26	Detaining Subject	10-76	EN Route
10-27	Drivers license Info	10-77	ETA (EST Time ARR.)
10-28	Vehicle Registration Info	10-78	Need Assistance
10-29	Check For Wanted	10-79	Notify Coroner
10-30	Unnecessary Use Of Radio	10-80	Chase In Progress
10-31	Crime In Progress	10-81	Breathalyzer
10-32	Man With Gun	10-82	Reserve Lodging
10-33	Emergency	10-83	Work School Xing At....
10-34	Riot	10-84	If Meeting..Advise ETA
10-35	Major Crime Alert	10-85	Delayed due to.....
10-36	Correct Time	10-86	Officer/Operator Duty
10-37	(Invest)Suspicious Veh.	10-87	Pickup/Distribute check
10-38	Stopping Suspicious Veh.	10-88	Present Phone # of.....
10-39	Urgent use Lights, Siren	10-89	Bomb Threat
10-40	Silent No Lights,Siren	10-90	Bank Alarm At.....
10-41	Beginning of Duty	10-91	Pick Up/Subject
10-42	Ending Of Duty	10-92	Improperly Parked Car
10-43	Information	10-93	Blockade
10-44	Permission to Leave..For..	10-94	Drag Racing
10-45	Animal Carcass At...	10-95	Prisoner/In Custody
10-46	Assist Motorist	10-96	Mental Subject
10-47	Emergency Road Repair	10-97	Check(Test) Signal
10-48	Traffic Repair At...	10-98	Prison/Jail Break
10-49	Traffic Light out At....	10-99	Wanted/Stolen Indicated

Thanks again to **Russ (MI-002); John (IL-010)** and **Dave (IL-354)** for there support of the PS-GL Column. That's it for room this month see ya in December.

Dave

PUBLIC SAFETY—NORTH EAST

Send Public Safety amd Special Emergency frequencies, radio system details, and questions as follows—New England States, New York, Pennsylvania, New Jersey, Maryland, Deleware, and District of Columbia:

Gary Saffer, 6 Roach Road, Stoughton, MA 02072

Welcome to the November edition of PSNE. Once again I have more info than room to put it in so with only a few words of intro we'll get to it. For all of you who have taken the time to do profiles, I have them but no room. If I can I'll try to make the january editon "all profiles".

First some miscelaneous info that I haven't had space to list previously. From Todd Heiler (NY-338) the following: Monroe County Sheriff 460.475R/Orleans County Fire dispatch 46.080/Genesse County Fire Dispatch 46.120/Rochester Police Records and Intersystem with Gates County 460.325/ Dept. of Environmental Conservation 159.225/New York State Thruway Auth. 453.525/// From Carl Gerosa III (NY-117) New York Police Department's Emergency Services Unit (ESU) recently took delivery of 6 Heavy Rescue vehicles known as REP's, from Salisbury Mfg. These units are used for rescues,hostage incidents,forced entries for EMS, victims trapped in vehicles, Bomb runs, and ingeneral things that in other cities fire rescue units are used for. ESU units can be heard on 470.8375 the Special Operations Division frequency.

Also from Carl a short piece on the Town of Easton MA Fire Department.

Station 1 Lothrop St Extension
Station 2 Depot St
Station 3 Foundary St
Dispatch 33.50
Fireground 33.58
Callsign KCA-627-Radio Test at 6 PM

1-0 Chief
1-1 Engine 1
104 Ambulance (Station 1)
104A Reserve Ambulance

101 Service Truck Fire Prevention
1-2 Mack Engine 2 (Station 2)
102 Captain Ford Pickup
1-3 Mack Engine 3
103 Deputy Chief
1-4 Mack Engine 4 (station 2)
1-5 International Engine 5 (Station 3)
1-6]nternational Engine 6 (Station 2)
106
1-7 Forest Fire 1
1-8 Ladder Truck (Station1)
1-9 Captain/Deputy Chief
Forest Fire 2 Army Brush Truck

From Charles Secoges Jr. (PA-223) some bits of NJ info: Mommouth County Fire 154.430/ Middlesex County Fire-Channel 1 33.82--Channel 2 33.84?--Channel 3 33.90 Mutual Aid/ The Following towns are also heard on 33,82: Norht Brunswick/Carteret/Avenel/Colonia/Woodbridge/Old Bridge/South River// Edison-33.56

Thank you everyone for the input. Readers like yoourselves prove that we don't always need long pieces to fill the column. I look forward to hearing more from you in the future.

From Warren Silverman (NY-214) a listing of the various Volunteer Ambulance Squads at the Various New York Colloges and Universities.

State Univ. of New York (SUNY)

Albany-Five Quads Vol. Amb. Squad Colonial Quad	154.115
Buffalo- Baird Point Volunteer Ambulance Corps	155.205
Campus Volunteer Ambulanc Corps	155.205
Security	453.725
Cortland-Cortland State Emergency Squad	155.745
Oswego-Student Association Volunteer Amb. Corps	155.295
Stony Brook-V.A.C. (5-35___ units in City system)	155.175
Agricultural and Technical College At Canton-	
Student AID Transport	155.745
Maritime College-Bronx NY-Rescue 1 and Security	155.085
City University of New York	
Brooklyn College Vol. Medicle Team Bedfrod and AVE H	462.975
Cornell University EMS Ithica NY	155.160
" " Security	155.520
Rensselaer Polytechnic Institute (RPI)	
Rennselaer Rescue/RPI Ambulance	155.220
Syracuse University Ambulance	155.295
Also authorized on 155.265/155.280/155.340	

Thank you Warren for a most unusual article, and I hope to see more from you in the near future.

It's been several years since anything about the Boston Area Police Emergency Radio Network (BAPERN) has appeared in the newsletter. Since reader input is a little low right now I'm going to take the oppurtunity to write an update piece.

The BAPERN system was conceived in the early 1970's after the infamous "Harvard Riots". During this period of unrest police officers from several different eastern Mass. departments were called in to assist the Cambridge Police in quelling the protests. Due to the total incompatibilty of the various radio systems (some low band, some high band, some UHF) and the lack of any sort of common frequency in either cruiser or portable radios communication between the various officers of the various agencies was almost non-existaent. Sortly after this Officers and Chiefs from various departments met to design a system to overcome these faults and improve radio communications. The system was designed to have the following features: Common Frequency Band, the then new UHF t-band,/ ID and Emergency functions/ Common Callsigns, Unit Id numbers,and nomenclature/ and the elimination of the various codes then in use.

The system started to go on line in late 1975 early 1976. Motorola was chosen as the vendor and construction of the system was started in the mid-1970s. The first departments started to swictch over in late 1975 early 1976. At the time the radios used were Micor 4 channel units with Id,Emergency and Scan for the vehicle radios and MX-350 4 channel portables with Id and emergency. All radios were equipped with repeater talk around, also known as direct. Currently Syntor X mobile radios and MX-350S (synthesized) portable radios are used. Also an option is the Syntor X-9000 mobile radio although I know of no use currently.

The radios are channeled as follows. Channel 1, local frequency, usually used only by one department but there is some sharing. Channel 2 district channel, used for communication between towns in the same district and as a backup is channel 1 should fail. Channel three system wide, used for wider area communications or to communicate with agencies not equipped with a district channel. Channel 4 sytem wide, used as a back up to channel 3 and for detectives from different agencies to coordinate operations.

Currently the system is undergoing a period of expansion and the system has grown well beyond the original 34 cities and towns that originally made up the system. There has been some talk of creating a new district called Northeast, but as of yet I know of no action in this regard.

Below I have listed the current members of the system, their frequencies, unit Id's and any special information. All base stations in the system are known as "Control" eliminating the various uses of "Base", "Headquarter", 'Station" or as was common the three digits of the callsign. Also note that the Boston, State, Metro, and Capitol Police Departments do not have their field units equipped with BAPERN frequencies but can and do cross patch throught their base station consoles to allow cross communications. These departments and some others as noted below also use their own unit numbering systems and not the BAPERN one.

BAPERN Unit and Frequency Assignments

Town		Frequency	Units	District	Notes
North		470.4875	--------	------	
West		470.7375	--------	------	
South		470.9125	--------	------	
BAPERN 3		470.7875	--------	------	
BAPERN 4		470.5625	--------	------	
Arlington		470.1625	0351-0370	North	
Belmont		471.4125	0371-0390	North	
Beverly		471.3375	0901-0920	North	
Braintree		471.5125	0811-0830	South	
Brookline	Ch 1	471.0125	0541-0570	West	The first to move to the new system thus the odd configuration
	Ch 2	471.0625			
Cambridge	Ch 1	470.3125	0211-0290	North	Channel 2 seems to be used for towing,detective, checks etc.
	Ch 2	471.3125			
Canton		471.6625	0681-0700	South	Shared channel with Stoughton
Chelsea		470.8825	0121-0140	North	
Danvers		472.3125	0971-0990	North	
Dedham		470.9625	0621-0640	South	Shared with Norfolk Co. Sheriff
Everett		470.8125	0141-0160	North	
Framingham		471.7625	0941-0961	West	
Lexington		471.1875	0411-0430	North	
Lynn		472.4125		North	Have retained old Callsigns
Lynnfield		471.5125		North	Cannot confirm if online
Malden		470.7625	0161-0180	North	
Manchester		472.2375	0991-1000	North	
Marblehead		472.3375	0061-0070	North	Shared channel with Swampscott
Medford		470.5875	0321-0350	North	
Melrose		471.0375	0071-0090	North	
Middleton		471.6125	0041-0050	North	
Milton		470,4625	0701-0730	South	
Natick		472.7375	0962-0970	West	
Needham		470.3625	0571-0590	West	
Newton		470.8375	0481-0540	West	May also use 470.3875
Norwood		470.4375	0661-0680	South	Shared with Westwood
Peabody		471.5125		North	Have retained old Callsigns
Randolph		471.4375	0731-0750	South	
Revere		470.8625	0101-0120	North	
Salem		471.6375	0021-0040	North	
Somerville		470.5375	0181-0210	North	
Stoughton		471.6625	0881-0900	South	Shared with Canton
Swampscott		472.3375	0051-0060	North	Shared with Marblehead
Wakefield		471.7875		North	Have retained old Callsigns
Walpole		471.5875	0901-0920	South	
Waltham		470.5125	0431-0460	West	
Watertown		470.7125	0461-0480	West	

Wellesley	471.4875		West	Does not appear to be online yet
Weymouth	470.9375	0831-0860	South	
Winchester	471.3625		North	Does not appear to be online yet
Winthrop	471.7375	0091-0100	North	

Below are the non-community users of BAPERN

MBTA	470.6625	0861-0880	All	Also units in the 1031-1040 range
District Attorneys				
Middlesex Co.	471.5625	0291-0320	North	
Norfolk Co.	470.9625	0641-0660	South	Shared with Dedham And Sheriiff
Suffolk Co.	471.1125	0391-0410	North	Also 470.9875
Sheriff	471.6875		North	Charles Street Jail Maintain own numbering system

Other Agencies

Foxboro 471.1375 This is a town but they have chosen to retain their own numbering system although they have BAPERN radios. Base id's as 855.

Mass General Hosp. 472.7875 This prestigious hospital recently installed a new radio system including a console with BAPERN capabilities. They have their own numbering system.

Quincy 470.3375 0751-0810 South This city hhas been going on the system soon for ten years now. When or if they will is a good question.

Metro Police This large regional Police Agency was also supposed to go on BAPERN several years ago. However after years of funding not being approved they have recently started work on a Trunked system.

A final note, if you live in the eastern Massachusetts area within the Route 495 belt and you suddenly lose your local police department, it's possible that they have moved. Don't despair, set you scanner to search in the range of 471.7000 to 472.7000. You may find them or you may find something even more interesting. If you do be sure to write and let me know what you find. You will also hear a lot of non police traffic as there are a number of business repeaters also in the same block of frequencies. Also note that Peabody, Cambridge, Danvers, Wakefield and possibly Lynn use codes of some sort. Cambridge has also retained their old numbering system.

BAPERN 800 mhz Trunked Frequencies

Shaortly after finshing the above piece I had a chance to visit the FCC office in Quincy. This office repalces the one in Boston and features better access, free parking and nicer accomodations including air Conditioning. While there I spent a couple of fun filled hours looking through the microfiche. This is some of what I came up to that concerns BAPERN.

811.2125	812.2125	813.2125	814.2125	815.2125
811.2375	812.2375	813.2375	814.2375	815.2375
811.4625	812.4625	813.4625	814.4625	815.4625
811.4875	812.4875	813.4875	814.4875	815.4875

I'm not sure of the proposed use of this block of frequencies although I would guess that they will be used for a future mobile data terminal system. If anyone out there has a scanner with 800 mhx capabilities give a listen and let us know what you hear. There will be more 800 mhz listings later in this column.

Lin (VT-002) sends us a very nice article on Kennebec County Maine and State and Local Police frequencies and callsigns for Vermont. Thank you Lin and I hope to see more from you in the future.

Vermont State Police

1-99	State Police Headquarters Cars	151	Project Crash (DWI Van)
100	Governor	152	
100A	Lt. Governer	153	

101-129	County Sheriffs and Chief Dep.	154	
130-149	Motor Vehicle Dept.	155	Health Dept.
150	Aeronautics	178-179	Atty. General's Invest.
		180-198	State Attorneys
200-297	State Police Troop A Colchester and St Albans Barracks		460.225
298-299	Liqour Control Troop A		
300-397	State Police Troop B St Johnsbury & Derby Barracks		460.150
398-399	Liqour Control Troop B		
400-497	State Police Troop C Rutland, Middlebury & Shaftsbury		460.375
498-499	Liqour Control Troop C		
500-596	State Police D Rockingham, Bethel, & Brattleboro		460.475
597-599	Liqour Control		
600-699	State Police Troop B Middlesex Barracks (Formerly K)		460.425
800-879	Dept. of Corrections Staewide		460.325
900-992	Fish and Game Dept.		159.405
995	Water Resources		
Federal Agency callsigns			
900	US Border Patrol Swanton		163.625
901-903	Drug Enforcement Agency		
904	US Secret Service		
905-909	FBI		
910-911	BATF		
912-919	US Marshall Service		

Radios are set up as follows:
F1 Troop Freq.
F2 Car to Car All Police Statewide
F3 Repeaters All Police Statewide
F4 interdepartment All Police Statewide

Barracks Identify themselves by city name, i.e. Colchester
Many state police and federal agencies use area barracks frequencies

Vermont Local Police Agency Call Numbers And Frequencies

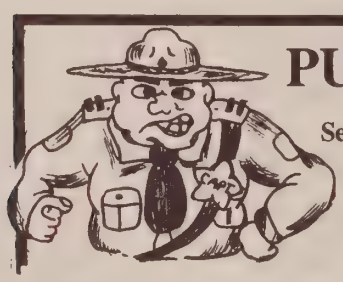
M2	Rupert	
M3	Westminster	460.475
M4	Baltimore	
M5	Berlin	460.425
M6	Williamstown	460.425
M7	Danby	460.375
M8	Stamford	
M9	Clarendon	460.375
M10-M19	Norwich	460.475
M20-M39		
M40-M59	Bennington	460.125
M220-M229	Ludlow	460.250
M230-M238	Lyndonville	460.150
M239	East Haven	460.150
M240-M249	Manchester	460.050
M250-M259	Middlebury	460.400
M260-M279	Milton	460.400
M280-M288	Newport	460.250
M289	Canaan	460.150
M290-M299	Northfield	460.175
		460.425
M300		
M301		
M302		
M303	Wells	460.375
M304	Rutland Town	460.375
M305		
M306-M307	Wallingford	460.375
M308-M309	Sherburne	460.375
M310-M317	Randolph	460.050
M318-M319	Proctor	460.375
M320-M338	Stowe	460.250
M339	Chittinden	460.375
M340-M349		
M350-M359	Dover	460.475
M360-M369	Shelburne	460.250
M60-M69	Bradford	460.150
M70-M79	Brandon	460.050
M80-M96	Brattleboro	460.200
M97	Vernon	460.475
M100-M109	Bristol	460.400
M110-M149	Burlington	460.125
M150-M155	Castleton	460.175
M160-M169	Chester	460.175
M170-M199	Colchester	460.100&460.075
M200-M209	Hardwick	460.150&460.450
M210_M219		
M500-M507	Winhall	460.375
M508-M509	Readsboro	460.375
M510-M519	Richmond	460.225
M520-M529	Charlotte	460.250&460,225
M530-M539	Morristown	460.250
M540-M549	Williston	460.225
M550-M557	Reading	460.475
M558-M559	W Windsor	460.475
M560-M569	Weathersfield	460.475
M570-M589	Barre Town	460.075&460.425
M590-M591	Bethel	460.475
M592	Pownal	460.375
M593		
M594-M595	Pawlet	460.375
M596	Halifax	460.475
M597		
M598		
M599		
M600-M629	Springfield	460.175
M630-M679	Rutland City	460.200
M680-M699	St. Johnsbury	460.200
M700-M704	Richford	460.225
M705-M709	Enosburg	460.225
M710-M719		
M720-M739	St. Albans	460.050

M370-M389	S Burlington	460.175	M740-M744	Rochester	460.475
M390-M418	Essex	460.100	M745-M749	Dorset	460.375
M419	Pomfret	460.475	M750-M779	Hartford	460.250
M420-M429	Swanton	460.050	M780-M799	Barre Town	460.075
M430-M439	Vergennes	460.400	M800-M829	Montpelier	460.050 460.175
M440-M449	Waterbury	460.175	M830-M839		
		460.425	M840-M849		
M450-M459	Wilmington	460.250	M850-M859		
M460-M479	Winooski	460.200	M860-M869		
M480-M489	Woodstock	460.100	M870-M879		
M490-M494			M880-M882	Arlington	460.375
M495			M883	Sunderland	460.375
M496					
M497	Guilford	460.475			
M498	Whitingham				
M499	Newbury	460.150			

Small and Part-time Departments are dispatched by the area State Police Barracks. All units are equipped with the same F2-F4 as the State Police use. F1 is the local frequency.

Lin also tells us that the Vermont State Police are testing a 1987 Jeep Cherokee as a patrol vehicle in the Northwest Kingdom (Essex County). It is painted and equpped the same as the regualr Plymouth Gran Fury units.

That's it for this month, I've managed to go over again (sorry Carol) I expect to be getting a computer soon, if I do I'll definately get a word processor program with a spell checker in it. Next month the big first anniversary issue, or something like that.



PUBLIC SAFETY—SOUTH EAST

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows—Florida, Georgia, N. Carolina, S. Carolina, W. Virginia and Virginia:

Jorge L. Rodriguez, 1129 Castile, Coral Gables, FL 33134

Hello and welcome once again to the Southeast Public Safety Column!

This month we return to our spotty coverage of the states in the Southeast. After attempting to cover each and every state the effort has failed for now.

As mentioned in the September, 1987 Newsletter From the CAPTAIN'S DESK (page 8) there will soon be an Assistant Editor for this column to help cover the northern states in this region. In addition to this, certain unforseen events have occurred to create a situation that may allow me to dedicate more time to the column.

Like the rest of you I too have not been satisfied with the contents of the Southeast Public Safety Column for the past 12 months. Although this is a volunteer effort, you the reader deserve to get a good column that covers the area in which you live. Although we could never cover every area, each and every month. I believe good coverage should include something from each state in the column area every month and each major population area should be covered a few times a year and as changes occur.

This however has not been the coverage that you the members have received and for that I apologize. I will keep trying and hopefully with these recent changes the column will improve and live up to its title and satisfy the information needs of you the members.

From the State of Florida Communications Plan

This month we cover several counties in Florida. Most notably Orange County whose major city is Orlando, Fl -home of Walt Disney World (tm) and Palm Beach County:

COUNTY	AGENCY	CHANNEL (MHz)	TONE (Hz)	REMARKS
Nassau	Sheriff	155.640/155.970	156.7	Primary Disp. Ch.
	Callahan	155.640/155.970	156.7	Patrolled by S.O.
	Fernandina Beach	154.725/155.310	156.7	Primary Disp. Ch.
	Hilliard	155.640/155.970	156.7	Patrolled by S.O.
Okaloosa	Sheriff	460.300/465.300	186.2	Primary Disp. Ch.
		460.475/465.475	186.2	Primary Disp. Ch.
		37.30	None	Not in plan conformance Should be phased out
	Ft. Walton Beach	460.075/465.075	186.2	Primary Disp. Ch.
	Crestview	460.375/465.375	186.2	Primary Disp. Ch.
	Niceville	460.325/465.325	186.2	Shared Channel
	Valparaiso	460.325/465.325	186.2	Shared Channel
Okeechobee	Sheriff	154.800/155.535	131.8	Primary Disp. Ch.
		460.050	131.8	Vehicular Repeater
	Okeechobee	460.100/465.100	123.0	Primary Disp. Ch.
Orange	Sheriff	460.025/465.025	114.8	Civil Channel
		460.125/465.125	114.8	Sector 1 & 3 Channel
		460.175/465.175	114.8	Mobile Data Channel
		460.275/465.275	114.8	Sector 2 & 4 Channel
		460.300/465.300	114.8	DVP County-Wide
		460.475/465.475	114.8	Detective Channel
		156.090	114.8	Vehicular Repeater
	Apopka	155.010/155.655	141.3	Primary Disp. Ch.
	Eatonville	453.550/458.550	146.2	Shared Channel
	Edgewood	155.010/155.655	101.4	Not in plan conformance Utilizing 155.580
Orange (Cont'd)	Maitland	453.550/458.550	146.2	Shared Channel
	Oakland	155.910/156.210	141.3	Shared Channel
	Ocoee (C.D.C.)	155.910/156.210	141.3	Shared Channel
	Orlando	460.050/465.050	141.3	Information Channel
		460.075/465.075	141.3	Car-to-Car Channel
		460.100/465.100	141.3	West Channel
		460.400/465.400	141.3	East Channel
		460.425/465.425	141.3	Tactical Channel
		460.450/465.450	141.3	Investigative/Traffic Ch.
	Windermere	155.910/156.210	141.3	Shared Channel
	Winter Garden (C.D.C.)	155.910/156.210	141.3	Shared Channel
	Winter Park	453.375/458.375	127.3	Primary Disp. Ch.
		453.450/458.450	127.3	Primary Disp. Ch.

	U.C.F.	155.700/158.970	136.5	Not in plan conformance Utilizing 155.700 Simplex
Osceola	Sheriff	460.200/465.200	156.7	South Channel
		460.325/465.325	156.7	County-Wide Ch. #2
		460.375/465.375	156.7	County-Wide Ch. #1
		155.190	None	Portable Only Ch.
		155.580	156.7	Vehicular Repeater
	Kissimmee	154.755/155.430	146.2	Primary Disp. Ch.
		155.985	146.2	C.I.D. Channel (L.G.)
	St. Cloud	154.875/155.610	136.5	Primary Disp. Ch.
Palm Beach	Sheriff (C.D.C. #1)	154.815/155.550	103.5	West Dispatch Ch.
		154.845/155.580	103.5	Secondary Uniform Ch.
		154.755/155.490	103.5	Digital Ch.
		154.725/155.715	103.5	Central Dispatch Ch.
		154.785/155.520	103.5	East Dispatch Ch.
		154.650/155.310	103.5	Tactical Ch. Not in plan conformance. Using 154.650/155.610
	Atlantis	154.785/155.520	103.5	Member, Coop. Disp.
		154.725/155.715	103.5	Center #1 (S.O.)
		154.755/155.490	103.5	
		154.845/155.580	103.5	
	Belle Glade	154.815/155.550	103.5	Member, Coop. Disp.
		154.725/155.715	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	Not in plan conformance
		154.755/155.490	103.5	Utilizing 155.865
	Boca Raton (C.D.C. #3)	470.3875/473.3875	156.7	Tactical Channel
		470.5375/473.5375	156.7	Information Channel
		470.9875/473.9875	156.7	Dispatch Channel
		471.0125/474.0125	156.7	Dispatch Channel
		471.0375/474.0375	156.7	Dispatch Channel
	Boynton Bch.	470.9875/473.9875	156.7	Member, Coop. Disp.
		470.3875/473.3875	156.7	Center #3 (Boca Raton)
		470.5375/473.5375	156.7	
		471.0125/474.0125	156.7	
		471.0375/474.0375	156.7	
	Briney Breeze	154.785/155.520	103.5	Member, Coop. Disp.
		154.725/155.715	103.5	Center #1 (S.O.)
		154.755/155.490	103.5	Not in plan conformance
		154.845/155.580	103.5	Utilizing 154.025
	Cloud Lake	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	
		154.785/155.520	103.5	
		154.815/155.550	103.5	
	Del Ray Bch.	471.0125/474.0125	156.7	Member, Coop. Disp.
		470.3875/473.3875	156.7	Center #3 (Boca Raton)
		470.5375/473.5375	156.7	
		471.0375/474.0375	156.7	
		470.9875/473.9875	156.7	
	Fl. Atlantic University	155.985	None	Primary Disp. Ch.
	Glenridge	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)

Palm Beach (Cont'd)	Golfview	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	
		154.785/155.520	103.5	
		154.815/155.550	103.5	
	Gulf Stream	471.0125/474.0125	156.7	Member, Coop. Disp.
		470.3875/473.5375	156.7	Center #3 (Boca Raton)
		470.5375/473.5375	156.7	
		471.0375/474.0375	156.7	
		470.9875/473.9875	156.7	
	Green Acres	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	
		154.785/155.520	103.5	
		154.815/155.550	103.5	
	Highland Bch.	471.0375/474.0375	156.7	Member, Coop. Disp.
		470.5375/473.5375	156.7	Center, #3 (Boca
		470.3875/473.3875	156.7	Raton)
		470.9875/473.9875	156.7	
		471.0125/474.0125	156.7	
	Juno	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	
		154.785/155.520	103.5	
	Jupiter	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	
		154.785/155.520	103.5	
	Jupiter Inlet Colony	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	Not in plan conformance
		154.785/155.520	103.5	Utilizing 154.995
	Lake Clark Shores	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	Not in plan conformance
		154.785/155.520	103.5	Utilizing 154.965
	Lake Park	154.725/155.715	103.5	Member, Coop. Disp.
		154.755/155.490	103.5	Center #1 (S.O.)
		154.845/155.580	103.5	Not in plan conformance
		154.785/155.520	103.5	Utilizing 155.955
	Lake Worth	155.010/155.655	103.5	Member, Coop. Disp.
		155.145/155.610	103.5	Center #4 (W.P.B.)
		154.725/155.715	103.5	Not in plan conformance
		154.755/155.490	103.5	Utilizing 155.430
		154.845/155.580	103.5	
	Lantana	155.010/155.655	103.5	Member, Coop. Disp.
		155.145/155.610	103.5	Center #4 (W.P.B.)
		154.725/155.715	103.5	Not in plan conformance
		154.755/155.490	103.5	Utilizing 155.145
		154.845/155.580	103.5	
	Manalapan	155.010/155.655	103.5	Member, Coop. Disp.
		155.145/155.610	103.5	Center #4 (W.P.B.)
		154.725/155.715	103.5	Not in plan conformance
		154.755/155.490	103.5	Utilizing 154.025 and
		154.845/155.580	103.5	45.280
	Mangonia Park	154.755/155.490	103.5	Member Coop. Disp.
		154.785/155.520	103.5	Center #1 (S.O.)

	154.725/155.715	103.5	Not in plan conformance
	154.845/155.580	103.5	Utilizing 155.115
N. Palm Bch.	154.755/155.490	103.5	Member Coop. Disp.
	154.785/155.520	103.5	Center #1 (S.O.)
	154.725/155.715	103.5	Not in plan conformance
	154.845/155.580	103.5	Utilizing 156.090
Ocean Ridge	471.0375/474.0375	156.7	Member Coop. Disp.
	470.5375/473.5375	156.7	Center #3 (Boca Raton)
	470.3875/473.3875	156.7	Not in plan conformance
	470.9875/473.9875	156.7	Utilizing 154.025
	471.0125/474.0125	156.7	
Pahokee	154.815/155.550	103.5	Member Coop. Disp.
	154.725/155.715	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.755/155.490	103.5	Utilizing 155.310
Palm Beach	155.010/155.655	103.5	Member Coop. Disp.
	155.145/155.610	103.5	Center #4 (W.P.B.)
	154.725/155.715	103.5	Not in plan conformance
	154.755/155.490	103.5	Utilizing 155.010/155.565
	154.845/155.580		
Palm Beach Gardens	154.725/155.715	103.5	Member Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.785/155.520	103.5	Utilizing 154.875
Palm Beach Shores	154.725/155.715	103.5	Member Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	
	154.785/155.520	103.5	
Palm Springs	154.725/155.715	103.5	Member Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.785/155.520	103.5	Utilizing 154.965
Rivera Beach	154.725/155.715	103.5	Member, Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.785/155.520	103.5	Utilizing 155.850
Royal Palm Beach	154.725/155.715	103.5	Member, Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	
	154.785/155.520	103.5	
South Bay	154.815/155.550	103.5	Member, Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.725/155.715	103.5	
	154.845/155.580	103.5	
	453.700	None	Simplex (Local Traffic)
South Palm Beach	154.725/155.715	103.5	Member, Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.785/155.520	103.5	Utilizing 154.025
Tequesta	154.725/155.715	103.5	Member, Coop. Disp.
	154.755/155.490	103.5	Center #1 (S.O.)
	154.845/155.580	103.5	Not in plan conformance
	154.785/155.520	103.5	Utilizing 155.310
West Palm Beach (C.D.C. #4)	155.010/155.655	103.5	Dispatch
	155.145/155.610	103.5	Dispatch
	154.725/155.715	103.5	S.O. Dispatch
	154.755/155.490	103.5	Digital

		154.845/155.580	103.5	Tactical Not in plan conformance Utilizing 159.150 and 159.030 Simplex
Pasco	Sheriff	45.660/45.500	179.9	Repeater Channel #1
		45.620/45.900	179.9	Repeater Channel #2 To Be Implemented
		45.640	179.9	Simplex L.G. Channel #4
		45.540	179.9	Simplex Channel #3
		45.740	127.3	Mobile only - Shared Channel
		45.780	107.2	Mobile only - Shared Channel
	Dade City	45.780	107.2	Shared Channel
	Hudson	45.660/45.500	179.9	Patrolled by S.O.
	New Port Richey	45.740	127.3	Shared Channel
	Port Richey	45.740	127.3	Shared Channel
		45.560	127.3	L.G. Channel
	San Antonio	45.660/45.500	179.9	Patrolled by S.O.
	St. Leo	45.780	107.2	Shared Channel
	Zephyrhills	45.780	107.2	Shared Channel
	State Atty. (6th Ckt.)	453.150/458.150	141.3	North Channel
Pinellas	Sheriff (C.D.C. #1)	154.755/155.430	101.4	Primary Disp. Ch.
		154.815/155.550	101.4	S.O. Primary Ch.
		154.710/155.250	101.4	Mobile Digital Ch.
		155.640/155.970	101.4	Primary Dispatch Ch.
		155.850/156.150	101.4	Mobile Digital Ch.
	Airport	155.745/158.805	101.4	Primary Disp. Ch. (L.G.)
	Belleair (C.D.C. #2)	460.225/465.225	141.3	Primary Disp. Ch.
		460.375/465.375	141.3	Local Area Tac. Channel Not in plan conformance Utilizing 156.000
	Belleair Bch.	460.225/465.225	141.3	Member, C.D.C. #2 (B.P.D.)
		460.375/465.375	141.3	Not in plan conformance Utilizing 156.000
	Belleair Bluffs	460.225/465.225	141.3	Member, C.D.C. #2 (B.P.D.)
		460.375/465.375	141.3	Not in plan conformance Utilizing 156.000
	Clearwater	460.100/465.100	141.3	Tactical & Admin. Ch.
		460.275/465.275	141.3	East Channel
		460.375/465.375	141.3	Local Area Tac. Ch.
		460.425/465.425	141.3	Information Channel
		460.475/465.475	141.3	West Channel
	Dunedin	460.025/465.025	141.3	Primary Disp. Ch.
		460.375/465.375	141.3	Local Area Tac. Ch.
	Gulfport	153.965	None	L.G. Channel
	Indian Rocks Beach	154.755/155.430	101.4	Member, C.D.C. #1 (S.O.)
		155.640/155.970	101.4	

	154.710/155.250	101.4	
	155.850/156.150	101.4	
Indian Shores	154.755/155.430	101.4	Member, C.D.C. #1 (S.O.)
	155.640/155.970	101.4	
	154.710/155.250	101.4	
	155.850/156.150	101.4	

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming to:

George N. Hoggatt, 17473 E. 16th Dr, Aurora, CO 80011

ARIZONA Steve IA056
Courtesy the Radio Shack on N. 4th in Flagstaff.

Flagstaff Police 1	156.210
Flagstaff Police 2	156.030
Flagstaff Fire	155.745
Flagstaff EMS	155.325
Holbrook Police	155.790
Williams Police	155.535
Williams Fire	154.085
Winslow Police	154.875
Winslow Fire	154.145
Page Police	155.730
Prescott Police	154.800
Fredonia Police	155.730
N.A.U.	155.610
Hopi P. D.	453.725
Navajo P. D.	
Tuba City	153.845
Window Rock	154.950
Shiprock	154.740
Chinle	154.710
Kayenta	155.460
Doney Park Fire	154.160
Kachina Village FD	154.175
Sedonia Fire	154.400
Pinewood Fire	154.310

Coconino County SO 1	155.490
Coconino County SO 2	155.835
Navajo County SO	155.700
Yavapai County SO	154.740
Mohave County SO	39.500
Apache County SO	154.995
Maricopa County SO	460.075
Arizona Highway Patrol	
Flagstaff	460.025
Holbrook	460.300
Prescott	460.425
Kingman	460.475
Phoenix	460.325
W.Phoenix	460.300
Statewide	460.225
Statewide	154.935
N. Arizona EMS	463.075
Arizona Dept. Trans.	156.105
Arizona Game & Fish	
T.A.C.	151.150
State	151.460

COLORADO Joyce CO-032, Tim MO-070, Harry CO-?, editor

The off again, on again Denver and Aurora 800 Mhz systems are off again due to budget problems. The Denver system money was used to pay for new police cars and there is some doubt that City Council will ok the contract. The system was projected to cost $4.7 million and the Public Safety Department is $5 million short this year. Nobody can see why it is necessary to buy a new radio system and cancel a new recruit class. More police on the street may be more important than new radios.

Aurora is in similar straights, but they hope to get the go ahead in six months. Their system is more committed as Motorola is installing and testing as this is being written (Sept. 4). This phase will be to get the system installed with seven sites (voting receivers, etc.). The first radios will be installed in the Water and Sewer Department, Parks and Recreation, and Streets vehicles. The main purpose is to see if the system will work as advertised and to hold the frequencies. The planned system is the same as the Miami system as described in "From the Captain's Desk" in the September issue. If fully installed it will have all city agencies on it, sharing all 20 channels. The Aurora Radio Shop is very happy that it will be impossible to monitor both by citizens and the media. Good public relations isn't it? However, there is hope if the promised Bearcat 1000 comes about (See Monitoring Times September 1987)

SOUTH METRO DENVER FIRE MUTUAL AID DISTRICT

This group became effective April 1, 1987. The combined dispatch center is scheduled to begin operation in Littleton Jan. 1, 1988. The station/unit numbers planned are as follows - most are already in use:

10-19 Littleton FPD
20-29 Englewood FD
30-39 Castlewood FPD
40-49 Bancroft FPD
50-59 Sheridan FD
60-69 Cherry Hills FPD
70-79 Parker FPD
80-89 Skyline FPD

MISC. NOTES

Parker FPD is giving up its three channel conventional 800 Mhz system. They say it works good and is very reliable equipment but it is very expensive ($1500 per HT vs. $350 for VHF). It is also not compatible with any other area system and they have to have two radios for mutual aid. They also have a new chief that has new ideas. If they join the mutual aid district (see above) they will have to go back to VHF anyway.

On Aurora Fire, units numbered 80-89 are Sable-Altura FPD. They are dispatched on Adams County Fire channel 2 but have Aurora radio for mutual aid.

Aurora and Denver have a working mutual aid pact for the northeast areas. Aurora stations 5 and 12 and Denver station 29 will respond on calls in northeast Aurora and the Summer Valley area of Denver. The Aurora equipment has Denver Fire radio and the Denver equipment has Aurora radio.

Denver and Bancroft have a working mutual aid pact for the southwest areas near Southwest Plaza. Again both departments will respond to fires in the area and they all have each others radios.

UTAH Fig CALA-359

Davis County Sheriff. DCSO operates on an 8 frequency channel plan which is fairly standardized countywide. This particular plan was from one of the DCSO Ambulance units. Channel 8 can be different, depending on what part of the county the SO unit is assigned:

155.505 F-1 Statewide UHP (multi-purpose communications)
155.310 F-2 UHP Farmington Office (Ogden Dispatch)
155.685 F-3 DCSO car to car and paging
155.640 F-4 DCSO dispatch
155.970 F-5 DCSO tactical

155.415 F-6 Layton PD dispatch
156.150 F-7 Clearfield PD dispatch
154.340 F-8 HEAR

Clearfield and Layton cities do not have paramedic services, and DCSO handles medical calls in those areas. DCSO deputies assigned to the ambulance units are certified EMT level 1. UHP Statewide is a multi-agency channel used by all law enforcement agencies throughout Utah.

Davis County Sheriff Search and Rescue

Another division of DCSO which handles search and rescue operations countywide. Davis County has mountain, desert and water (the Great Salt Lake) areas where rescue calls normally take place year-round. The search and rescue teams are made up of volunteers with DCSO deputy leaders. Search and rescue personnel must specialize in at least one area of rescue:

155.640 F-1 DCSO dispatch
155.685 F-2 DCSO car to car
155.505 F-3 UHP statewide
155.160 F-4 Nationwide Search and Rescue frequency

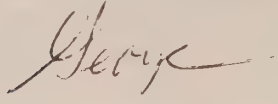
And finally, during the last part of my vacation, a brush fire broke out near the Mount Tipanagos Cave Monument area. Although primarily handled by the Uintah National Forestry personnel, the following agencies were heard during the three day fire:

171.525 Uintah National Forest (3-Alpha units)
163.150 Tipanagos Monument
153.950 Utah County FD (1 J 600)
154.445 Utah County FD (fire condition reports)
154.415 Orem FD (fire condition reports east city boundary)
154.190 Provo FD (condition reports near north city line)
154.280 FERN (condition reports between Orem and Provo FDs)
154.710 Utah County SO (traffic control)
460.475 Pleasant Grove PD (traffic control and condition rpts)
155.625 UHP Orem office
155.505 UHP statewide

During the fire, most all agencies (except UHP and Pleasant Grove) were on the Uintah NF frequency. Because of the expense of "aircraft cover" and with the uphill (away) burn from any structures, a single helicopter with, what appeared to be a "55 gallon drum," was making water drops. At last count (8-8-87) approximately 1250 acres were burned, and the preliminary cause appears to be lightning strikes. Ironically, a severe lightning and thunderstorm on 8-6-87 helped contain the fire.

Can anyone explain what is referred to as "...the other mode..." continuously mentioned by units on 171.575 and 153.950?

That's all folks.



RCMA has a Telephone Number

The new RCMA telephone number is (714)545-9551. It's 'manned' by an answering machine, and while it's been established for RCMA members, its use is limited. You may leave a message concerning delivery or renewal problems; you cannot use it to request club information or order back issues. Appropriate response will be made by letter or postcard, not by telephone. Any call regarding a membership problem MUST be accompanied by your membership number.

Please remember that it is a toll call, so be sure before you dial that a written communication won't do just as well.

PUBLIC SAFETY—CALIFORNIA

Editor: Dan Figueroa, CA-LA-359,
P.O. Box 7181, Capistrano Beach, CA 92624

Welcome to the November 1987 PS-CA column. Us Editors hope that your "turkey holidays" are enjoyable. The "magic number" is down to 1, and counting. Let's clear the frequency of routine traffic...

Here's a real "Communications Gap" which was published in the July, 1987 issue of "THE CALIFORNIA HIGHWAY PATROLMAN", as authored by CHP Officer Fred Martin. (Special thanks to Editor Carol Perri, for permission to reprint).

"Talk about a miscommunication, miscomprehension, misunderstanding - read this one!!

"On April 23, 1987, at 2:30 PM, Officer Dan Schott had just left the Mission Grade Inspection Facility on I-680 on the outskirts of Fremont en route to a court appearance. A few minutes later, Officer George Barber, assigned to the same scale facility, had a message for Officer Schott regarding the impending court case.

"Using the car-to-car radio based at the facility, Officer Barber wanted to call Officer Schott except he forgot his assigned identification call number. So, Officer Barber used common CHP procedure and called the officer by name. Using sound, professional judgement and acceptable CHP procedure, Officer Barber said: '25 - OFFICER SCHOTT!, MISSION GRADE FACILITY. - No response.

"A short time later Officer Barber called again: '25 - OFFICER SCHOTT, MISSION GRADE FACILITY.'

"Officer Schott finally answered after the second call and Officer Barber relayed the message.

"Unknown to Barber or any other member of the CHP, a Bay area newspaper reporter happened to be monitoring police radio calls and overheard Officer Barber's radio transmission. The 'ace reporter' waited and then called surrounding police agencies inquiring, 'How's the officer who was shot?'

"Needless to say, the local cops went into a frenzy, conducting status and welfare checks on all their units. Unable to locate any 'Schott' officers, they called the CHP dispatch center in Oakland in an effort to locate the agency involved. All CHP units and scale personnel were present and accounted for!

"In the meantime, the mild-mannered ace reporter called the I-680 facility inquiring about the scale officer who had been 'Schott.' Officer Mike Callaway, answered the 'Schott/shot' question and immediately ended an embarrassing situation for both agencies--media and the CHP.

"By the way, embarrassed Officer Barber has memorized Officer Schott's call number!"

Let's switch to the Data Channel: From ROBERT [CAOR-026]: During a recent trip to the Santa Ynez Valley, he monitored the following:

460.275 Santa Barbara Sheriff (Orange) Dispatch
460.325 Santa Barbara Sheriff (Yellow) Tactical
460.025 Santa Barbara Sheriff (White) Unit to Unit
153.770 Santa Barbara Fire Dispatch
153.905 Santa Barbara Fire Tactical (A-3)
153.965 Solvang Local Government
45.320 Santa Barbara County Local Government (also 45.800)

Robert has also included the Radio Unit Designations. He indicates the system is broken down into 3 segments (Numbers-Letter-Numbers). The first number(s) indicate the agency:

STATE AND FEDERAL AGENCIES -

3	CHP Buellton	29	CHP Santa Barbara
9	CHP Paso Robles	69	CHP Bakersfield
14	CHP Santa Maria	12	FBI Santa Maria
28	CHP San Luis Obispo	15	FBI Santa Barbara

SAN LUIS OBISPO SHERIFF'S DEPARTMENT -

21	Coast Station	25	Civil (Division)
22	North Station	26	Field Command Post
23	South Station	27	Main Jail
24	Headquarters		

SANTA BARBARA SHERIFF'S DEPARTMENT -

31	Headquarters	36	Santa Ynez Station
32	Santa Maria Station	37	Cuyama Station
34	Lompoc Station	38	Jail/Transportation
35	Santa Barbara Station		

POLICE DEPARTMENTS -

41	Paso Robles PD	48	Atascadero PD
42	San Luis Obispo PD	51	Guadalupe PD
43	Morro Bay PD	52	Santa Maria PD
44	Pismo Beach PD	53	UCSB PD
45	Grover City PD	54	Lompoc PD
46	Arroyo Grande PD	55	Santa Barbara PD
47	Cal Poly PD	56	Carpinteria PD

COUNTY AGENCIES -

61	San Luis Obispo DA	72	Santa Maria Marshal
71	Santa Barbara DA	75	Santa Barbara Marshal

The Middle Letter indicates the type of unit:

A	1-man patrol unit	N	Narcotics unit
B	2-man patrol unit	O	Aquatic unit
C	Captain	P	Parking Enforcement
D	Detective unit	R	Reserve unit
F	Foot patrol	S	Sergeant
G	Coroner unit	T	Traffic unit
J	Juvenile unit	V	Vice unit
K	CSI, ID or Crime Lab unit	X	Extra patrol unit
L	Lieutenant	Z	Special assignment
M	Motorcycle		

The final numbers indicate Officer/Beat/Area. Other designations are:

Air	- Aero	Hundred	- Chief of Police
Commander	- Watch Commander	Medic	- Paramedic
CP	- Field Command Post	Rescue	- Search & Rescue unit
Executive	- Mayor	Staff	- Staff Officer

From JEFF [CAOR-012]: "La Mesa PD has been up and running on their new radio equipment for about a year now. All mobile units (well, all but 2) are equipped with Motorola Syntor-9000 radios. They are completely synthesized. The display is 11 alpha-numeric characters. No more channel numbers--Officers now see messages like 'CLEMARS' and 'BLUE FREQ' when changing channels. Alpha-numeric messages also appear when adjusting volumne, squelch, PL, etc. PLUS, these radios have DVP! Fortunately for monitoring enthusiasts, most traffic is transmitted in the clear. Also, the officers now have MX-360 HT's. Synthesized, 16 channels, and they even have DVP! To top it all off,

GOVERNMENT RADIO SYSTEMS
CALIFORNIA FOURTH EDITION

MASTER REFERENCE DIRECTORY
ALL 58 Counties in Calif
ALL State Agency Systems
ALL Federal Govt Systems

Police Interagency nets
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a new Motorola CentraCom II console. Great new equipment, but the increased sensitivity of the new mobile radios has really been pulling in some distant stations on the main dispatch frequency (153.845). Listening to a dial-up paging system for the LA Dept of Public Works can be a real pain! The price of progress..."

Jeff has also enclosed the La Mesa PD unit numbering system effective 07-05-87, 0700 hrs, as follows:

Unit 1	Chief of Police	40S	Traffic Sergeant
Unit 2	Patrol Division Cmdr	401-403	Traffic units
Unit 3	Service Division Cmdr	451-452	Animal Control Officers
Unit 4	Investigations Div Cmdr		
Unit 5	Reserve Unit Cmdr	50C	Reserve Captain
		50L-51L	Reserve Lieutenant
1ST WATCH (2300-0700 HRS)		50S-53S	Reserve Sergeants
10L	1st Watch Lieutenant	501-519	1-man Reserve units
10S	1st Watch Sergeant	521-529	2-man Reserve units
101-119	1st Watch 1-man patrol		
121-129	1st Watch 2-man patrol	7IS	Investigations Sergeant
		7I1-7I5	Investigators
2ND WATCH (0700-1500 HRS)		71S	Training Sergeant
20L	2nd Watch Lieutenant	751	School Liaison Officer
20S	2nd Watch Sergeant		
201-219	2nd Watch 1-man patrol	80S	Business Office Supervisor
221-229	2rd Watch 2-man patrol	801-809	Services Div personnel
3RD WATCH (1500-2300 HRS)		90L	Special Event - Lieutenant
30L	3rd Watch Lieutenant	90S	Special Event - Sergeant
30S	3rd Watch Sergeant	901-919	Special Event - Officers
301-319	3rd Watch 1-man patrol		
321-329	3rd Watch 2-man patrol		

From AL [GA-066]: While recently visiting the Santa Rosa area, he

obtained an extensive freq listing for the Santa Rosa/Sonoma County areas from the local Radio Shack store. Some of those freqs are:

39.160	Novato PD	151.415	State Fish & Game Warden
39.200	San Quentin Prison	151.460	CDF Sonoma County
39.240	Marin SO Main (Control 1)	151.655	Coddington Security
39.360	Marin SO Records Search	151.715	Santa Rosa College PD
39.520	San Quentin Prison	151.895	ESP Security (ESP Alarms)
39.640	Sausalito PD	153.755	Civil Defense Region 2
39.660	Sonoma SO (Coast Rptr)	153.845	Cloverdale FD/Ambulance
39.720	Marin Co (Various PD's)	154.025	Petaluma FD (Blue)
39.820	Novato PD (Car-to-car)	154.145	Santa Rosa FD (Yellow)
39.880	Sonoma SO (Coast Rptr)	154.100	Rohnert Park PD & FD
39.960	San Rafael PD (Main Ch)	154.280	Sonoma Co FD (White)
42.080	CHP Marin Co (Silver)	154.310	Sonoma Co FD (Green)
42.160	Napa/Vallejo FD	154.340	Solono Co Fire Control Net
42.340	CHP Statewide (Blue)	154.415	Napa Co Fire Control Net
42.440	CHP San Francisco (Pink)	155.100	Sonoma Co FD (Blue)
42.560	CHP Lake Co (White)	155.430	Napa PD
42.560	CHP Mendocino Co (White)	155.565	Clear Lake PD
42.580	CHP San Francisco Bay area	155.595	Petaluma PD
42.880	CHP Sonoma Co (Orange)	453.050	Santa Rosa City Govt
43.340	San Quentin Prison	453.150	BART Police
44.720	Sonoma State Parks	453.550	Sonoma SO Main Channel
45.200	Park Rangers/Road Maint.	453.575	Sonoma SO Records
46.120	Marin Co FD (Control 13)	453.975	BART Yard
46.280	Marin Co FD (Control 4)	460.025	Santa Rosa PD Ch 2
46.360	Novato FD (Control 35)	460.050	Santa Rosa PD Ch 3
46.500	Marin Co FD (Control 13)	460.275	Sonoma PD
45.200	CalTrans Lake County	460.375	Santa Rosa PD Main Channel
47.420	American Red Cross	460.775	Sonoma FD

From the RAFB: In their "Sparks From the Inland Empire," they report that the Murrieta Fire District has changed their dispatch freq from 154.145 Mhz to 151.385 Mhz. CDF/Perris continues dispatching.

From CAPT. BILL [FL-137]: Here are more Listener Profiles. We first go to the Central California area:

1.	460.100	Santa Barbara, Santa Maria PD's
2.	460.025	Santa Barbara, San Luis Obispo PD's
3.	460.050	All Law Enforcement
4.	460.275	Santa Barbara County Sheriff
5.	460.325	Santa Barbara County Sheriff
6.	460.225	Guadulupe Police Dispatch
7.	462.975	(911) Emergency - Dispatch
8.	467.975	(911) Life Support - Ambulance
9.	154.445	Santa Maria Fire - Dispatch
10.	153.950	Santa Maria Fire - Car to car
11.	153.770	Santa Barbara County Fire Dispatch
12.	154.250	Santa Barbara County Fire F-2
13.	154.280	Fire Department Mutual Aid
14.	464.525	Santa Maria Town Ctr. Security
15.	461.150	Bomar Investigations
16.	463.375	Boyd & Ass(ociates) Security
17.	461.750	Qverland Investigations
18.	461.750	(shared) City Motor's Towing Service
19.	463.700	Home Motors - Towing
20.	45.080	Animal Control
21.	460.150	San Luis Obispo Co. Sheriff F-1
22.	460.475	SLO Sheriff F-2
23.	460.175	Pismo, Arroyo Grande Police
24.	151.325	Nipomo, CDF
25.	44.640	Pismo Beach, Ranger
26.	44.960	Pismo Beach Patrol
27.	154.905	CHP Vehicle Extender
28.	42.560	Dispatch CHP - White
29.	42.720	Mobile CHP - White
30.	42.540	Dispatch CHP - Brown
31.	42.240	Mobile CHO - Brown
32.	42.340	Aircraft CHP - Blue

And from the San Diego area, here are 3 combined Listener Profiles (This list exceeds the 34 slots due to various interests):

1.	155.055	Oceanside PD Ch-1
2.	154.755	Oceanside PD Ch-2
3.	155.490	Oceanside PD Ch-3 (Car-to-car)
4.	154.920	CLEMARS (All police agencies net)
5.	154.935	CLEMARS - SWAT
6.	158.790	San Diego Police F-1
7.	158.970	San Diego Police F-2
8.	159.090	San Diego Police F-3
9.	159.045	San Diego Police F-4
10.	158.895	San Diego Police F-5
11.	158.910	San Diego Police F-6
12.	155.685	San Diego Police Tac
13.	154.725	San Diego Police Detectives
14.	156.030	Carlsbad PD Ch-1
15.	155.835	Carlsbad PD Ch-2
16.	156.015	Oceanside (Small craft police & rescue)
17.	156.600	Oceanside Port Operations (Summer use)
18.	154.235	North Inland - Fire
19.	154.385	Coastal - Fire
20.	155.085	Mutual Aid - All County Fire Departments
21.	154.280	Mutual Aid - California State Ch-1
22.	151.190	CDF - Unincorporated areas
23.	154.310	San Diego Fire F-1 (Primary)
24.	154.085	San Diego Fire F-8 (Operations)
25.	153.785	San Diego Fire F-3 (Paramedics)
26.	462.975	Life Flight (UC San Diego)
27.	140.500	Camp Pendleton Fire-2 USMC
28.	138.600	Camp Pendleton Fire-1 USMC
29.	149.450	Camp Pendleton Hospital Base
30.	149.925	Camp Pendleton Ambulance
31.	138.025	Camp Pendleton MP's Ch-3
32.	138.375	Camp Pendleton MP's Ch-1
33.	140.525	Camp Pendleton Crash Net
34.	42.880	CHP Orange
35.	42.120	CHP Gold
36.	154.920	CHP Hand held Extender
37.	453.925	San Diego County Sheriff - North Inland
38.	453.425	San Diego County Sheriff - Tactical & Car-to-car
39.	453.100	San Diego County Sheriff - Emergency
40.	155.760	Oceanside City Government
41.	151.985	Pacific Bell Telephone - Repair Dispatch
42.	160.335	Santa Fe RR PBX-3
43.	160.650	Santa Fe RR Road & Yard
44.	153.500	SD Gas & Electric - Repair Dispatch
45.	47.100	CALTRANS San Diego Area Dispatch
46.	162.000	San Diego Marine Oper. (Ship-shore)
47.	452.650	North County Transit District (Bus) Dispatch
48.	118.600	Palomar Airport Tower
49.	118.300	Lindbergh Field Control Tower
50.	124.350	Lindbergh Field Approach

Since there is nothing for the Inquiry Channel, we now release the frequency for routine traffic...

RAILROADS

Gary L. Sturm and Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad system details, and related questions to:

Bill Farmer, P.O. Box 1838, Thousand Oaks, CA 91360

Greetings once again from the RCMA Railroads Column. We received some letters this month, plus we have new frequency data from the latest issue of the AAR Frequency Assignment Plan.

A correction to an earlier listing—in our July column Wilmington

& Western was listed by an anonymous contributor as using 160.920. However, both the FCC microfiche and the AAR Frequency Assignment Plan show this railroad on 160.755.

Alan Henney (MD-069) wrote to say that there was a CSX derailment on B&O tracks near his home in Takoma Park, MD, and he wonders how one can find out which other railroads also use these tracks. Well, in this particular case the name of the railroad has changed. Baltimore & Ohio, the nation's oldest railroad, ceased to exist earlier this year when it was formally merged into CSX Transportation, along with Chesapeake & Ohio and Seaboard System. So those tracks are technically not B&O any more, they are now CSX. Locomotives are gradually being repainted into the new CSX colors.

There are, however, many places where one railroad has trackage rights to run over another railroad. To find out about those, one way is to look at a Rand McNally railroad atlas, which shows the owning railroad and which roads have trackage rights over each segment of line.

Alan also asked which frequencies are best to monitor to find out if something has gone wrong on a railroad system. Usually the road channel is the best all-around channel to monitor for general information. In the case of a derailment, the first report will usually be to the dispatcher on the road or dispatcher channel, followed by railroad police and maintenance of way forces being notified on their own channels. If the railroad has a PBX system, it will usually become active. In August, when Southern Pacific Had a derailment in the Los Angeles area, your editor heard about it on the PBX because it was too far away to hear the road channel from that area. The PBX repeater has wider coverage, so it's always a good idea to monitor the PBX for unusual happenings.

New member Joe Schultz (IL-357) wrote to ask for railroad frequencies in the Chicago area. He enclosed a SASE so we sent him what we had on file.

GRAND TRUNK WESTERN POLICE — CHICAGO

by MICHAEL YANUL (IL-014)

In recent weeks the Grand Trunk Western has changed its police frequency from 160.755 to 160.905 in Chicago. All other GTW frequencies have remained the same. GTW police also can be monitored on the city-wide rail police channel, 161.205.

The GTW police Chicago headquarters was relocated from the Elsdon Yard some years ago to the Railport Trucking Yard at 43rd Street and Damen Ave.

Always enjoy reading your fine column! [Thanks for the info, Michael! -ed.]

WASHINGTON (DC) METRO

by ALAN HENNEY (MD-069)

Montgomery County, Maryland has added (changed) channel 7 in its fire and rescue radios to 153.950 (mobile receive) and 154.830 (mobile transmit). This channel is used for Metrorail tunnel alarms and can be patched through to the Washington Metro system communications center. Supposedly underground satellites in many Montgomery County Metrorail tunnels are in place. 153.950 is used as a repeater for Metrorail tunnel communications. It has been used as channel 1 simplex for many years as a fireground channel (and still is).

POLK COUNTY, WISCONSIN

by ROGER WEST (MN-52, "Monitoring and the Law" editor)

While on vacation in Polk County, Wisconsin, I heard traffic on the following railroad frequencies. I don't have the users.

160.725	
160.890	[Chicago & North Western Ch 1 Road -ed.]
160.455	[Chicago & North Western Ch 2 Maintenance -ed.]
161.370	[Soo Line Ch 1 Road -ed.]
161.520	[Soo Line Ch 2 Yard -ed.]
161.085	[Soo Line Ch 3 Road -ed.]

ASSOCIATION OF AMERICAN RAILROADS RADIO FREQUENCY ASSIGNMENT PLAN

by BILL FARMER (CA-VE-010)

The latest issue of the AAR Plan, dated January 1987, has a few changes to existing railroads, in addition to the new short line information included above. We'll give you a rundown of some of the more significant changes.

Alexander Railroad, in Taylorsville, NC, changed its frequency from 161.520 to 160.620.

Amtrak changed the frequency for its shop switcher at Beech Grove, IN from 161.100 to 161.280, so the new Indiana Railroad could have 161.100.

Atchison, Topeka & Santa Fe Railway had several changes. At Kansas City, use of 161.115/160.515 for east car inspector repeater was discontinued. The old west car inspector repeater, 161.475/160.950, became east, and a new frequency pair, 452.900/457.900, was placed in service for west car inspectors. Between Cutler, CA and Fresno, CA the link frequency was changed from 161.385 to 160.905. At Barstow, CA the use of 160.605 for yard switching was discontinued. At Stockton, CA, 160.335/161.460 was placed in service for PBX. At Elkhorn, MO, 160.245/161.490 was placed in service for PBX. A new frequency, 161.505 was authorized in Louisiana; we do not know what it is being used for. New links were put in service between Parnell and Midland KS on 452.825/457.825 and between Fredonia and Buxton KS on 452.900/457.900.

Austin & Northwestern, which took over the Southern Pacific Llano and Marble Falls branches in Texas, has been reported to be using the SP road channel of 161.550. They have been authorized to use 160.305 and 161.520, and we expect that one of these will become their road channel.

Burlington Northern's Chicago-only PBX channel, 160.425/160.935, has now been authorized at La Crosse, WI and Balltown, IA. Look for the use of this channel to spread to other areas of BN.

Chessie System got a new repeater authorization on 160.395 at Cleveland, Toledo, Detroit, and in the state of West Virginia. Could this be the start of a new PBX system?

Chicago & Illinois Midland discontinued use of 161.550 and in its place was authorized to use 161.310. What do they use this channel for?

Duluth, Missabe & Iron Range was authorized to add frequency 161.055.

Escanaba & Lake Superior added three frequencies: 160.290, 161.310, and 161.550.

Florida East Coast changed frequency of its car shop at Bowden Yard, Jacksonville FL, from 161.370 to 160.770. Looks like CSX Transportation may be extending the use of its former L&N road channel.

Little Rock & Western (Arkansas) changed its frequency from 161.025 to 160.965. This was probably done so that Missouri Pacific can extend the new Union Pacific PBX (160.605/161.025) into its area.

North Stratford RR in Beecher Falls VT added 160.560 to its list of authorized frequencies.

Patapsco & Back Rivers in Baltimore, MD discontinued use of 161.115 and in its place uses 160.635. Can anyone tell us what this channel is used for?

Texas City Terminal RR gained authorization for an additional channel, 160.725. What will they use it for?

Valley Railroad, in Essex, CT, added a channel, 160.695. This RR recently began operating freight service on ex-Conrail trackage near Middletown under the name of Connecticut Central. Perhaps the new frequency is for that operation.

West Tennessee RR at Trenton TN added 160.560.

That's all we have space for this month, folks—until we meet again, we wish you all happy scanning.

—Gary & Bill

RCMA NEW MEMBERS LIST

AUS 001 - DAVID S DONALD;GPO BOX 1707;SYDNEY NSW 2001;;AUSTRALIA;
AZ 083 - W V JUDD;1432 W HUNTINGTON DR;TEMPE;AZ;85282;
CABU007 - ROBERT P ADAMS;1675 MANZANITA AVE #49;CHICO;CA;95926;
CALA704 - H L CURTIS;4367 PARAMOUNT BLVD;LAKEWOOD;CA;90712;
CALA705 - HAROLD J ERICKSON;15025 OSWALD ST;SYLMAR;CA;91342;
CALA706 - PHILLIP OLIFF;1734 WARNALL AVE;LOS ANGELES;CA;90024;
CALA707 - HARRIS BOLDT EDELMAN;709 MILWOOD AVE;VENICE;CA;90291-3828;
CALA708 - HENRY R TORRES;1820 S MARENGO #6;ALHAMBRA;CA;91803;
CAMM001 - PAUL PAGE;P O BOX 8044;MAMMOTH LAKES;CA;93546;
CAMO007 - MARVIN B GIRDNER;255 E BOLIVAR ST #35;SALINAS;CA;93906;
CANA130 - PAUL KOVACH;GENERAL DELIVERY;KISBEY SASK S0C 1L0;;CANADA;
CARI064 - PAUL A FOUST;24302 DORNER DR;MORENO VALLEY;CA;92388;
CASD084 - PAT LYNN;750 STATE STREET #420;SAN DIEGO;CA;92101;
CASJ016 - AL --LAST NAME AND ADDRESS WITHELD BY REQUEST
CASZ013 - ED LAWSON;6609 VERHOEVEN CT;CITRUS HGTS;CA;95610;
CO 060 - CHIC E MYERS;89 S ELDRIDGE WAY;GOLDEN;CO;80401;
CO 061 - MARK D GERHARDS;ACO 704 MSB;FT CARSON;CO;80913;
CO 062 - DON GENNETTEN;P O BOX 11142;ENGLEWOOD;CO;80151-1142;
IL 359 - ROY M --LAST NAME AND ADDRESS WITHELD BY REQUEST
IL 360 - JOHN A --LAST NAME AND ADDRESS WITHELD BY REQUEST
IL 361 - WILLIAM H WALTER;4431 PRESCOTT AVE APT GA;LYONS;IL;60534-1966;
KY 048 - STANLEY W BEETEM;14 RIDGEWAY AVE;FLORENCE;KY;41042;
MA 179 - WILLIAM BOWMAN;14 RIO VISTA ST;NO BILLERICA;MA;01862;
MA 180 - JOHN F BUONO;21 ELM ST #5;MALDEN;MA;02148;
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NY 400 - JOHN J BAGAN;121 SEABREEZE DR;LIVERPOOL;NY;13090;
NY 401 - DAVID PHENES;1701 DALTON RD # 502;LIMA;NY;14485;
OH 203 - H M SLADE;2882 HAMDEN DR;XENIA;OH;45385;
OH 204 - VERNON R LINK;1693 PARK ROW DR;WORTHINGTON;OH;43085;
OH 205 - JEFF WEIDAUER;655 GARDEN DRIVE;CHILLICOTHE;OH;45601;
OK 044 - HUGH R WILLIAMSON;2209 MORGANDEE LN;WEATHERFORD;OK;73096;
OR 079 - EUGENE A COOLEY;2742 SE 138TH UNIT #129;PORTLAND;OR;97236;
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PA 252 - FRANK FALKOW;714 SUSQUEHANNA RD;PHILADELPHIA;PA;19111;
PA 253 - LARRY DUTTON JR;917 E MCPHERSON ST;PHILADELPHIA;PA;19150-3211;
TN 043 - JIMMY HOLLOMAN;1820 SKYLINE HGTS;DYERSBURG;TN;38024;
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TX 209 - MICHAEL J WASHINGTON;6070 ALPINE #4;BEAUMONT;TX;77708;
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VA 132 - JEFFREY A JOHNSON;P O BOX 504;BEDFORD;VA;24523;
VT 005 - LANCE S MICKLUS;177 WEST STREET;ESSEX JUNCTIN;VT;05452;
WA 087 - MIKE AIKEN;BOX 153;MOUNT VERNON;WA;98273;
WA 088 - R C ATWOOD;6716 SYCAMORE NW;SEATTLE;WA;98117;
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MEMBERSHIP CARDS AND BADGES

RCMA has no badges, decals, or membership cards for sale or distribution. The label on your newsletter is your membership card. While other clubs may have gimmicks or commercial good deals, our 'good deal' is your newsletter. You determine its content because you write it.

MAILING PROCEDURES

The newsletter mailed each month has a cover date for the following month. This practice is followed so that the US Post Office can deliver your issue no later than the first of the month designated on the cover.

New members whose applications are received before the end of the month will begin receiving the newsletter the following month. The first issue will be dated the month after that — as described above.

RENEWAL PROCEDURES

During the month your membership — and therefore your newsletter delivery — is due to expire, you will receive a renewal notice in the form of a postcard. It contains all the information you need to continue receiving the newsletter.

Renewal checks and new membership applications received by RCMA's General Manager, P.O. Box 542, Silverado, CA 92676, are processed for deposit on a weekly basis. Actual computer updating is done at the end of each month. If your check/MO is received after this cut-off date, you will miss the next issue of the newsletter and your new renewal date will be moved back accordingly.

PRORATED MEMBERSHIPS

Due to postage costs and other considerations, membership applications or renewals for any sum less than the current rate are prorated accordingly. This means that the renewal date will be due in less than a year. Please do not send more money to finish the year; just renew when your prorated date comes up.

Also because of postage costs, RCMA cannot comply with member requests to supply back issues free of additional charge (see the monthly Calendar section regarding ordering of back issues). If a late renewal results in a missed issue, the newsletter can be ordered from RCMA's secretary.

ADDRESS CHANGES

MEMBER notifications of address changes are also updated at the end of each month. If this type of address change notice arrives after the cut-off date, the mailing label will not reflect the new address until the following month.

The newsletter is mailed 3rd class under a bulk mail permit. When a member's address change is supplied by the POST OFFICE (instead of by the member), the charge to the club is 30¢.

SPECIAL FREQUENCY REQUESTS

Get in touch with your local RCMA group (see monthly Calendar section for chapter listings) or use the Contact/Information Wanted column for frequencies in your area. RCMA is not yet set up for national distribution of frequencies, although ultimately, the 'big picture' could include copies of the FCC and IRAC data bases, a fast computer, and software to select and sort in any order.

Contributions of frequencies and other material must be sent to the appropriate newsletter editor. (Editors use their own discretion in printing material sent them by non-members.) Data sent to P.O. Box 4563 is always subject to delay and sometimes cannot be forwarded because of postage costs.

DISCLAIMER

RCMA is a non-profit club for scanner enthusiasts. Neither RCMA or its newsletter are affiliated with, participate in the management of, or are responsible for, any other organization or publication. This disclaimer includes application to POLICE CALL, an annual publication put out by RCMA's good friend Gene Hughes. Queries about this publication cannot be answered by RCMA.

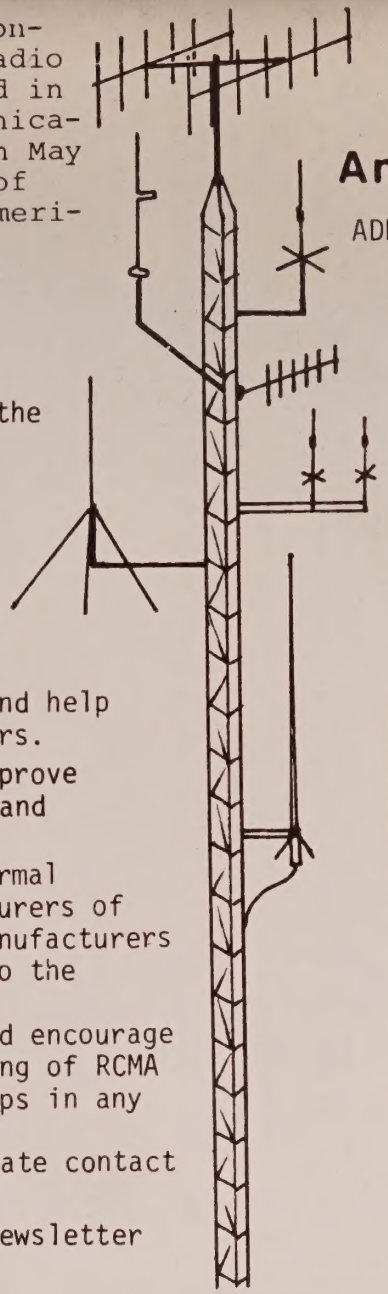
PLEASE REMEMBER — When writing to RCMA for any reason, include your membership number. Use it on your correspondence, checks, or money orders. RCMA tries hard to be responsive to your questions/problems. Using your membership number when you write helps us be of help to you.

The RCMA Board of Directors supports the policy of not printing certain federal law enforcement frequencies, e.g., Secret Service, FBI, Customs, DEA. Agreement with this policy has been reinforced by a membership survey.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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